S. Hrg. 100–154 Pt. 1

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

PART 1 (Pages 1–831)

DEPARTMENT OF AGRICULTURE
FARM CREDIT ADMINISTRATION

Printed for the use of the Committee on Appropriations

U.S. GOVERNMENT PRINTING OFFICE
72-852 O
WASHINGTON : 1987

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

S181-30

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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

THURSDAY, FEBRUARY 19, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2:05 p.m., in room SD–124, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Sasser, Harkin, Cochran, Kasten, and Grassley.

FARM CREDIT ADMINISTRATION

STATEMENT OF FRANK W. NAYLOR, CHAIRMAN

ACCOMPANIED BY:
JIM R. BILLINGTON, MEMBER, BOARD OF DIRECTORS
MARVIN R. DUNCAN, MEMBER, BOARD OF DIRECTORS

OPENING REMARKS

Senator BURDICK. The subcommittee will come to order.

Good afternoon. Today, we begin a series of hearings on the fiscal year 1988 budget for Agriculture, Rural Development, and Related Agencies.

FARM CREDIT ADMINISTRATION

We begin today by hearing from the Farm Credit Administration, which examines and regulates the Farm Credit System composed of 12 federal land banks, 12 federal intermediate credit banks, 13 banks for cooperatives, the Farm Credit System Capital Corporation, and approximately 390 federal land bank associations and production credit associations that lend to farmers, ranchers and their cooperatives.

The Farm Credit Administration does not receive a direct appropriation. Rather, it assesses institutions within the system based on its estimated expenses. Congress limits the amount of collection that can be made in each fiscal year.

The request for the 1988 budget for the Farm Credit Administration is the same as the amount allowed in fiscal year 1987—$39,420,000. To assist us in this budget analysis, we have with us the Chairman of the Farm Credit Administration, Mr. Frank W. Naylor, Jr.

Mr. Naylor, welcome to the hearing. We are pleased to have you. We are also pleased that the Chairman is joined by the other two members of the board, Mr. Jim R. Billington and Mr. Marvin R. Duncan. Welcome to you, gentlemen, also.

Gentlemen, the Farm Credit System faces an uncertain future. Recent reports are that financially, it may not make it for very long. Earlier this month, the Wall Street Journal reported that, "some of the system's 37 banks are expected to be insolvent by late 1987."

There is the possibility that the federal government will be asked to provide some type of financial assistance. Should this possibility become a necessity, I want us to be prepared for it. One-third of the nation's agricultural debt hangs on the operation of the Farm Credit System. I hope we can explore this issue today.

1985 AMENDMENTS

Under amendments passed in 1985, the Farm Credit Administration was given broader power to regulate the system. We have now had a chance for some of those changes to be put into effect. I hope we can explore those changes and their effects also today. I had also hoped that we might spend some time on what additional changes can be, and should be, expected.

Before we hear from the Board, I would like to recognize any other Senators for opening statements at this time. Then we will hear from the board, and finally, we will have time for questions on specific topics.

I would like to recognize my old friend, Senator Cochran.

STATEMENT OF SENATOR COCHRAN

Senator COCHRAN. Thank you very much, Mr. Chairman.

I want to join you in welcoming our witnesses today. I think this is a very important hearing. It indicates the concerns, I think, of the members of this committee when this is the first hearing of this Congress by this subcommittee. There is no more important subject pending before the Congress than the subject of farm credit.

Even though the legislation, which is referred to as the Farm Credit Amendments of 1986, was approved by both Houses and was signed by the President as part of the budget reconciliation package last year, I have been disappointed that the Agency has not moved more quickly to ensure lower interest rates for borrowers from the Farm Credit System. That was the intent of the legislation. It was the hope of those who were supportive and helpful in getting the Congress to pass this bill, but that has not become the reality.

Even though there has been some encouraging action taken in some areas of the country, farmers all around the country who borrow from the Farm Credit System are still being asked to pay interest rates that are higher than those being charged to borrowers from other financial lending institutions. This is a very big and heavy burden on the farming community, and I think we need to exhaust the possibilities for alleviating that problem.

I would like to hear from the witnesses today about any ideas, any initiatives, any suggestions as to what we, as a Congress, or the administration can do to deal more effectively with the problem.

NEW JACKSON LOAN PLAN

As a part of my statement, Mr. Chairman, I would like to have included in the record a copy of a letter that I have just received from the Farm Credit Banks of Jackson, Miss., specifically the senior vice president, Michael H. Fletcher, telling me about a new loan program approved by his board of directors on the afternoon of February 17.

In this letter, he describes a new program of tiered interest rates, four pricing tiers, that would bring the rates of interest to borrowers from the Federal Land Bank there down to 9 percent, with variable rates up to as high as 12.25 percent.

I hope that the witnesses can review this proposal and this program, and let us know what their reaction to it is. I know that we can't have that reaction as a part of the testimony this afternoon, but for the record. I would hope that this could get expedited review so that possibly some relief in some areas of the country, specifically this region, can become a reality.

Thank you, Mr. Chairman.

[The letter submitted by Senator Cochran follows:]

LETTER FROM MICHAEL H. FLETCHER, SENIOR VICE PRESIDENT, FARM CREDIT BANKS, JACKSON, MISS.

FEBRUARY 17, 1987.

MR. DAVID GRAVES,
Office of Senator Thad Cochran,
326 Russell Office Building, Washington, DC.

DEAR DAVID: This is the loan program that was approved by our Board this afternoon. We hope to be implementing this program during the next 15 days.

Sincerely,

MICHAEL H. FLETCHER, *Senior Vice President.*

FARM CREDIT BANKS OF JACKSON

MEMORANDUM

February 13, 1987.

To: The Board of Directors
From: Executive Committee
Subject: Proposal to Expedite/Expand FLB Loan Rate Relief

The existing FLB Fixed Interest Rate Program is a good product, providing a competitive loan rate to eligible borrowers. One criticism of this program is that too much loan officer time is required to provide each loan, thus limiting the number of borrowers that may be converted to lower loan rates each 30-day cycle. There is merit to this criticism.

We have been working toward an alternative process that would expedite and expand FLB loan rate relief to our creditworthy borrowers.

Attached for your review and concurrence is a proposed pricing structure and action plan to deliver relief to a large number of borrowers. This plan is similar to the rate relief processes used in other districts. It is not without risk, and recognizes the need to address:

1. *FCA Regulations*, which require that a current financial statement is received prior to granting a loan rate concession to the borrower; and

2. *Sound Credit Principles*, which mandate that the loan officer exercise credit analysis/judgment toward those loans considered for a loan rate concession; and

3. *Legal Considerations*, which require the borrower to sign a document evidencing his/her willingness to accept a loan rate different than the variable rate and based upon certain credit and term specifications.

The economic justification for loan rate relief is income maximization. A reduced return on a loan asset is better than having the creditworthy asset liquidate.

PROPOSED FLB LOAN PRICING PROGRAM

PRICING TIERS (CREDIT DRIVEN)

There are four pricing tiers, comprised of variable and fixed rate loans. Terminology and risk/price assignments would be:

Variable Rate—would be the highest rate offered and directed toward the weakest credit quality. At present, this rate is 12¼ percent. This is tier IV credit.

Fixed Rates—would be acceptable classified loans eligible for different rates, depending upon credit quality strength.

1. *Base fixed rate* would be priced about 200 basis points (2 percent) above the best loan rate offered. At present, these loans would be given a 1-year rate at 11 percent. This is tier III credit.

2. *Preferred II fixed rate* would be priced 100 basis points (1 percent) above the best loan rate offered. At present, a 1-year rate would be 9.95 to 10.00 percent. This is tier II credit and is already approved and "in place." Three- or five-year options are available in this tier.

3. *Preferred I fixed rate* would be the best offered (our highest quality credit), with a current 1-year rate of 8.95 to 9.00 percent. This is tier I credit, already in place, with 3- or 5-year options available in this tier.

ACTION PROGRAM

We would contact every acceptable classified loan via mail asking them to assist us in providing loan rate relief to them by completing an enclosed financial statement and conversion agreement form. The borrower's financial condition, assuming at least an acceptable rating is sustained, and the agreement form will allow for an immediate reduction to the base fixed rate.

Additionally, borrowers submitting financial statements and receiving a loan rate reduction may qualify for a second rate reduction. Within a specific number of days (90 days probably), the loan officer will contact those acceptable borrowers qualifying for the tier I or tier II rates, getting an option agreement signed and converting the loan to the (lower) fixed rate.

Loan officers processing these documents will exercise the necessary level of credit analysis/judgment in reviewing financial statements for the base rate classification (the first reduction), and then deeper analysis for the tier II or tier I eligibility (the second reduction).

STATEMENT OF SENATOR GRASSLEY

Senator BURDICK. Senator Grassley.

Senator GRASSLEY. Thank you, Mr. Chairman.

I am glad, for the first time that I have been on the committee, to start out with this very important issue of farm credit, and the very important role that the Farm Credit System can play, or at least ought to be playing in solving that problem.

You folks, who are regulators on the board for the system, are regulating a system that just 2 or 3 years ago was, of all the institutions affecting agriculture, the most respected. The Farm Credit System was the most respected of those institutions serving agriculture, and today it is the least respected of any of those institutions serving agriculture.

LOCAL CONTROL LOST

We have seen a system that was set up 60 years ago to serve farmers, to be owned by farmers, and to be controlled by farmers, forgetting the farmer entirely in the sense that today the control is so far removed from that local board member that there is no input from the local farmer.

Whether or not it is owned by farmers is questioned by the fact that a lot of people are talking about freezing stock. A lot of farmers out there who have stock in the system are wondering if they are ever going to get their money out of their stock. As I see in my state, if the farm credit people are moving to get nonagricultural people gobbling up the farmland as they offer the best interest rates to those farmers, then I don't see that system serving farmers that own the system.

Particularly, I see that as very much in evidence, when I see a farm change hands from the person who has been farming it, and trying to pay his loan, being foreclosed upon. That, in and of itself, is not an illegitimate thing to be doing. But the fact that that farmer, who is being removed from his farm, was not being offered the same loan, that somebody new who is taking over that farm is being offered cash-flow, that, I see, as a very immoral thing, not immoral in itself, but immoral because it is coming from an institution that was set up to be owned by farmers, controlled by farmers, and to serve farmers, but is not serving the farmers that it was meant to serve.

NEW BOARD-NEW FCA

That is the environment we are now in. As a new board, I know that you are trying to change that, and it is probably very difficult for you to change it. You are coming in at a time when it is very difficult for agriculture, I know that. But this is the environment we are in, and this environment, as I see through the appropriations process, or later on through the authorization process, is one that I want to have a chance to influence through some change in law.

Mr. Naylor, particularly, as I remember, with you in your former position in USDA, and as you had to speak for the administration, I tried to accomplish some things that maybe I got one-tenth of what I was trying to accomplish because either you had the votes, or you had the art of persuasion, and I didn't have enough record on my side to prove my point. I think that now, down the road, it is now 15 or 18 months from that period of time, I remember so often your telling me, you prefaced every sentence by saying, "I hear what you are saying, but," and you had some reason to disagree.

Now at this point, we have thought that what we accepted in that legislation as being done is not being done now. We are not going to miss that chance, this opportunity when we reauthorize.

I assume that there will be a request for change in the legislation, and for the loans to be granted to the Farm Credit System that they are going to need. You heard what I was saying at that time, to a large extent, not because I wanted to, but we didn't have the votes, we deferred to your judgment.

Now at this point, I think that we have enough of a track record that we can prove our points and we are going to accomplish those changes in the law that are going to give the first right to the farmers that the system was supposed to give them originally. They are going to have that now so that that system, owned by the farmers, to serve farmers, and to be controlled by farmers will, in fact, turn out to be that system, or it won't exist as far as I am concerned.

Thank you very much, Mr. Chairman.

STATEMENT OF SENATOR KASTEN

Senator BURDICK. Senator Kasten.

Senator KASTEN. Thank you very much, Mr. Chairman.

This hearing is supposed to deal with the Farm Credit System and FCA's budget. The fact is that both are, I think, linked. Today, obviously, we are concerned about the future of the Farm Credit System.

CONCERN FOR THE SYSTEM

In my view, we must retain the Farm Credit System as a dependable source of affordable credit for agriculture. Nowhere are PCA's and Federal Land Banks more important for agriculture than they are in my state of Wisconsin.

It is inevitable that the size of the system's portfolio must decrease. I regard it as inevitable that some federal financial assistance will be needed this year if the system is going to survive. The key question, I think, that we have to ask ourselves is: Are we, in the Congress, and you, as the regulators, going to allow the system's portfolio to collapse willy-nilly, and accept the responsibility for the massive federal bailout that will be necessary to save the system?

Or, on the other hand, are we going to implement a plan to downsize the system rationally, using the tools that Congress provided in the 1985 and 1986 farm credit amendments in hopes of saving the system, helping farmers who depend on the system, and limiting the amount of federal assistance the system will need to survive?

I look forward, Frank, to your testimony.

Also, from conversations that I have had with people associated with the Farm Credit Capital Corporation, it is my understanding that its board is meeting today and tomorrow, and that coming out of the Farm Credit Capital Corporation board meeting are likely to be some very concrete suggestions as to that organization's role in preserving the Farm Credit System.

I am hopeful that the Capital Corporation, with some of the recommendations that I understand they are about to move forward on, and you as the regulator, together with this subcommittee, can all work toward the kind of a situation that I have just described: That is a plan to downsize the system rationally, using tools that you have as a regulator, that we have as a Congress, that the Capital Corporation has, and to downsize that system in a way that will, in fact, help farmers who depend on the system, and at the same time limit the amount of federal assistance that the system needs to survive.

I look forward to your testimony, but I also look forward to working with you on the goals that I know all of us on this committee share.

Thank you, Mr. Chairman.

STATEMENT OF MR. NAYLOR

Senator BURDICK. Now we will hear from you, Mr. Naylor.

Mr. NAYLOR. Thank you, Mr. Chairman.

I am delighted to have this opportunity, with my colleagues, to appear and apparently be the first to appear before the committee with regard to the next fiscal year budget.

We have a prepared statement, which I have submitted for the record, and with your permission, I would just summarize some of those points, rather than reading it into the record, if that is acceptable to you, Mr. Chairman.

Senator BURDICK. It is very acceptable.

Mr. NAYLOR. Thank you.

1985 AMENDMENTS

Mr. Chairman, in 1985, the Congress enacted very significant amendments which substantially changed the role of the Farm Credit Administration. The Farm Credit Administration, I think, can best be described, prior to that time, as a policymaker, the regulator, the legislative proponent of the Farm Credit System, responsible in a very real way of being its principal spokesman.

One of the weakest links that resulted out of that was that the regulatory activity was weakened to the extent that the agency did not have sufficient authority to protect the safety and soundness of the system's operations for its borrowers.

The 1985 amendments made a very significant change in that it, at the Congress' direction, made the Farm Credit Administration an independent financial examination and regulatory agency in the executive branch. The Farm Credit Administration now solely examines and regulates the Federal Land Banks, the FICB's, the PCA's and the FLBA's, and the banks for cooperatives.

Our principal objectives, as a result of your actions in the Congress, are to assure the safety and soundness of the system operations, and to protect the interests of individual borrowers and investors within that system. FCA now has similar enforcement authorities as other federal regulators of financial institutions including the power to issue cease and desist orders, to levy civil money penalties and to remove officers and directors of system institutions.

One other important distinction which proves occasionally troubling for us, Senator Grassley, for example, was the very significant, and I think appropriate, change in that the Congress indicated that they did not want the Farm Credit Administration to intervene in the day-to-day management, fine detail management, and operational decisions of the system, which indeed, Senator Cochran, was reaffirmed last fall with the 1986 amendments, when we were removed from the interest rate setting responsibility.

The FCA does not, as a result of its status as an arm's length regulator, participate in the routine management operations, or daily operations of the system institutions. But we are very much involved in the instances where violations of law or regulations occur, or where actions are being taken by the institutions which are unsafe or unsound or jeopardize the rights of individual borrowers, which was provided for under the legislation in 1985.

1986 AMENDMENTS

There was one additional very significant change in legislation, Mr. Chairman, and that was the 1986 legislation, designed, as Senator Cochran indicated, to give the system more discretion in setting interest rates. It also provided for the use of regulatory accounting.

As a practical consequence, regulatory accounting provided the system the opportunity in the most simplistic of terms, to borrow funds from itself, and indeed borrow funds from its own members, and to repay those loans over a 20-year period, if it was necessary to correct an impairment or, alternatively, as our regulations are written, also to reduce interest rates to individual borrowers. By and large, the system institutions have elected to use this regulated accounting authority to correct impairments of their operating capital position, which has occurred in several districts.

It is important, however, that we remember that there is no magic in regulatory accounting. It brings no new resources to the system. Losses are still being taken as they occur, and the obligations still have to be met when they mature and are due.

The Congress charged us, as a regulator, to ensure that those institutions, which elected to use these new authorities, fully and completely disclose the implications of those choices to their members. That has caused a good deal of concern, I think, as those disclosures have begun to be made, at the prospect that some impact could conceivably occur if the banks were unable to repay the loans they had made to themselves under what they believe to be reasonable and sound business plans. Behind that, and equally strong, is the prospect of government support and backing, which was clearly built into the 1985 amendments.

So while there is some risk, clearly, under the use of this RAP accounting, it need not be as severe as some have perhaps assumed it would be, but the borrower has the right to know that we are playing by a different set of rules when a bank utilizes regulatory accounting in dealing with financial problems that it is incurring.

Mr. Chairman, as part of our statement, we have included a quick summary of what we feel are the four, from a regulatory perspective, major problems which the system must address if it is to become a strong and viable lender, which I believe we all together share must be the case.

FOUR PROBLEMS FACING THE SYSTEM

First, the system is carrying an unacceptably high level of nonperforming loans and acquired properties. As of the fourth quarter, acquired properties totaled just over $1 billion throughout the system, a significant portion of that in the Midwest and in the Southeast.

There has been some improvement, as we have received, subsequent to the preparation of this statement, the fourth quarter final numbers, in the number and amount of nonaccruing loans, which is now some $7 billion, down $1 billion from the third quarter of 1986. The system continues to have difficulty clearing these nonaccruing loans and in working out compromises or restructurings in behalf of individual borrowers.

Senator Cochran, you raised this question, I believe, a little earlier. This board and these members have been among the strongest proponents of substantial and appropriate restructuring of loans for a long, long time. We continue to press aggressively to encourage system institutions to utilize authorities that they have in order to accomplish that.

That has been slow in developing. Through the end of the third quarter, only 1,500 of the 58,000 loans had been restructured. We are advised by the system that when its fourth quarter numbers are actually finalized that number may rise to 2,500. All of the districts now have within their management written plans which, we are encouraged, they are applying rapidly and aggressively, to undertake substantial restructurings which are beneficial to producers, but we still have a long way to go in that regard.

Second, the system's overhead remains far too high. Its bricks and mortar and salary costs are still running at about $800 million annually, essentially what it was several years ago, despite a downsizing of the system, and despite the fact that substantial changes in the way we do business need to be carried out to provide better quality service to our producers and to pass those on in terms of improved services and interest rates.

Third, the system continues to face the very serious problem of high-cost debt. In the late 1970's and into the 1980's, it issued a substantial amount of very expensive debt that did not have call provisions, and that debt continues to remain on its books as an impediment to their ability to reduce interest rates to individual borrowers, even where the effective use of regulated accounting is taken into consideration.

These are decisions which the individual banks make, however, and are no longer under the direction or control of the Farm Credit Administration.

The fourth problem, which I think ties into all of these, Senator Grassley, and I think you reflected very appropriately, is the impact of many of the operating problems on the confidence of individual members that their system is continuing to serve them, and that they are receiving the kind of consideration which they should have. This continues to be a major problem particularly in the Midwest.

Mr. Chairman, these four operating problems are crucial, and their successful resolution is crucial to dealing with the system returning to a position of health and strength.

LITIGATION AND 1987 LEGISLATION

There are a number of litigation actions pending now, and the system has been, among its senior management and directors, experiencing difficulty in getting agreement on a number of financial decisions that it needs to be able to continue to effectively carry out its operations.

If this litigation is not reduced or altered in the near-term, and if the internal problems continue to be unresolved by system management, in answer to your question earlier, Mr. Chairman, indeed the probability of the need for additional legislation to deal with these problems and get this system back on its feet, perhaps even this year, is a very real possibility.

Whether or not hard capital will need to be a part of that remains to be seen and is dependent upon some of the situations to which Senator Kasten alluded and upon actions currently being considered by boards at this very moment out in the operating system and the effectiveness that those provisions will carry out.

FCA BUDGET

In the face of that, Mr. Chairman, we are proposing to you, and the basic purpose of the hearing today, is a budget authorization which has been approved by the Farm Credit Administration Board. Keeping in mind the need to control expenditures in the system, we have frozen the budget level and we have already begun to look for ways in which we can even cut back further on the operating expenditures of the Farm Credit Administration itself.

The proposal that we have before you today, Mr. Chairman, asks for an amount to be approved in the total sum of $39,420,000. This is the same as was asked for in the 1987 fiscal year. This represents primarily $21,125,000 of salary cost and $5,385,000 of benefit, entitlement, and approximately $6,000,000 of travel expenses or, in summary, 83 percent of the total agency budget is covered in salaries, benefits, and travel needed to carry out the examination responsibilities for which we are charged by the Congress.

Finally, we have engaged and completed the hiring of what I believe to be one of the finest, most competent staff, particularly at the senior level, that is in place in any regulatory agency today. They are developing and have extensive training programs for our new personnel. We have committed some $400,000, slightly more than that, for training in this coming year to continue to raise the quality of our staff and assure that competent and appropriate examination procedures are carried.

PREPARED STATEMENT

Mr. Chairman, with that, I think we have summarized our basic statement for you, and my colleagues and myself would be delighted at this time to respond to your questions and those of the other members of your subcommittee.

[The statement follows:]

STATEMENT OF FRANK W. NAYLOR

It is an honor for me to appear before this distinguished subcommittee of the Appropriations Committee. Before I discuss the details of the Farm Credit Administration budget, I feel an update of our status as a newly created federal financial regulator is called for.

1985 FARM CREDIT AMENDMENTS ACT

The Farm Credit Amendments Act of 1985, as you know, made the Farm Credit Administration (FCA) an arm's length Federal regulator of the financial institutions of the Farm Credit System (System), a privately owned and operated financial cooperative. The three member FCA Board comprised of Marvin R. Duncan, Jim R. Billington, and myself, was appointed by the President, and given the responsibility and authority by Congress to regulate, examine and certify the condition of the System to Congress and the Executive Branch. Mr. Duncan and myself were confirmed by the Senate in May of 1986 and Mr. Billington in October.

FCA has the same authorities as other Federal regulators of financial institutions including the power to issue cease and desist orders, to levy civil money penalties, and to remove officers and directors of system institutions.

More than 40 institutions of the System have been examined under the reorganized FCA. To date the FCA has initiated 25 enforcement actions including 15 cease and desist orders, 8 formal written agreements and two supervisory letters.

With the 1985 Amendments Congress also created the Farm Credit System Capital Corporation. This System institution is responsible for making assessments against capital surpluses of System institutions to ensure the availability of financial assistance for troubled System institutions.

In 1986 $1.183 billion was identified for transfer among System institutions through Capital Corporation assessments, System Capital Preservation Agreements, or other loss sharing agreements. Some 20 lawsuits have been filed challenging the transfering processes.

1986 FARM CREDIT ACT AMENDMENTS

In 1986 the Farm Credit System proposed Regulatory Accounting Practices (RAP) legislation to allow institutions to amortize over 20 years certain specified expenses, in effect giving themselves a 20 year loan.

The Farm Credit Amendments Act of 1986 was accepted in the closing hours of the 99th Congress as an amendment to Omnibus Reconciliation Act. In addition to the RAP provisions, it removed the Farm Credit Administration from prior approval of System interest rate changes.

The practical consequences of the RAP legislation is to provide time for System institutions to work out their operating difficulties. The FCA regulations require System institutions to provide their stockholders, and investors in their bonds, financial statements which clearly disclose their financial condition under Generally Accepted Accounting Principles (GAAP) with the effect of RAP disclosed in footnotes. We believe this was the intent of Congress in the 1986 Amendments.

There is no magic in regulatory accounting. It brings no new resources to the System. Losses still have to be taken as they occur. Obligations have to be met when due. Additional time to develop solutions to problems is its principal attraction.

SYSTEM PROBLEMS - THE REGULATORY PERSPECTIVE

The System's problems from the regulator's perspective are four fold; nonearning assets, excessive administrative expenses, outstanding high priced debt and member relations.

The System has two kinds of nonearning assets -- acquired properties and nonaccrual loans.
The System has $1.110 billion in acquired properties and is carrying $8 billion in non-accrual loans. It also has another $5 billion in loans classified as high risk. Of 58,616 nonaccruing loans about 1,500 have been restructured, or about 3 percent of the nonaccruing loans. Acquired property is an equally difficult problem. Disposal of this volume in the currently depressed market would likely drive land prices even lower.

The System's cost of doing business is about $800 million annually and has remained constant for the last several years.

The elimination of staff duplication, nonproductive offices and unnecessary labor on low yield loans could help reduce overhead.

The high-cost debt problem can't be solved overnight. Some of the System bonds do not mature until 2003 and because the securities have no call provisions the owners can hold them until maturity. Regulatory accounting may be a partial solution to this problem since a portion of the debt could be amortized over 20 years.

The fourth problem is what I have termed member relations. Any cooperative program is dependent on good member relations.
Members need to be worked with on their loans, be informed of the condition of their institution, and be up-to-date on services and programs. At FCA we have attempted, by regulation, to guarantee certain rights to borrowers which were mandated in the 1985 Amendments. Institutions are now required to inform borrowers of interest rates being paid at the time of the loan and any variation in that rate, or the effective rate, over time. Also borrowers have the right to copies of all the documents which they sign at the loan closing.

And now, Mr. Chairman, I would like to give you and the subcommittee a budget overview of the Farm Credit Administration.

BUDGET OVERVIEW

The Farm Credit Administration Board has approved an amount of $39,420,000. This figure respresenta a 0 percent increase over the Agency's FY 87 Budget. I believe the composition of this budget is indicative of my hard lined approach to the management of financial resources and appropriately reflects the Agency's basic needs as we fully address our regulatory responsibilities.

As you know, the Farm Credit Amendments Act of 1985 marked the initiation of a period of significant change for the agency--a strengthening of the Agency's financial regulatory role, and a concurrent expansion of the Agency's examination activities resulting in the employment of new Examiners and the establishment of 7 new field offices. Significant budgetary impacts were perceived upon the enactment of the Amendments Act of '85. The FCA took an aggressive posture toward full implementation of these amendments and in so doing, embarked upon a concerted effort to recruit new professional staff members and to equip them with the basic necessities to do their jobs.

The passage of the Supplemental Appropriation for FY 86 was indicative of this Committee's support of our efforts and provided us with the additional funding needed to carry out these enhanced Agency responsibilities.

We have yet not experienced one full year of operation with a full staff performing the expanded regulatory activities. This fact has compounded our budget formulation process, resulting in what I believe to be stringent estimates of allocations for travel, training and the like.

Since my appointment last May as FCA's Chairman, I have taken a close look at existing Agency policy and I have instituted policy changes wherever economies could be realized. It is with this philosophy that we were able to pare back the agency's budget to the same level as that for FY 87.

FCA's operating costs for FY 88 can be summarized as follows:

Of the $39,420,000 agencywide total, $21,125,00 represents salary costs, with an additional $5,385,00 reflecting the corresponding benefit expenditures. Recent changes in benefit entitlements for newly hired Federal employees have coincided with our hiring effots in support of our field examination responsibilities. The benefit allocation in our FY 88 budget reflects our best estimate, at this point in time, of our needs in this area. The preponderance of newly hired employees coupled with the voluntary nature of benefit programs for some new hires might indicate at some future point that we underestimated the effect that these new benefit programs would have on our Agency's budget. In the absence of historical experience we have conservatively estimated our benefit needs in the FY 88 budget.

Since performance of our regulatory role requires constant travel to Farm Credit System institutions for our Examination and Supervisory staffs, the travel allocation represents the frequency of our travel needs. Travel is budgeted in FY 88 at $6,285,000.

Taken together, Salaries, Benefits, and Travel comprise approximately 83% of the Agency's FY 88 budget.

To provide our new Examiners with the knowledge required to effectively perform in their jobs, we have begun an extensive training program, utilizing experienced FCA Examiner/Supervisors as instructors. The provision for this on-going training effort comprises $429,000 of the FY 88 Budget. We believe it essential to continue this in-house training to impart additional information of greater complexity as newly hired personnel advance through the program.

The remaining budgetary categories cover office supplies, equipment, and computer software/hardware needs funded at the minimum level required to effectively operate the Agency.

ASSESSMENTS FOR OPERATING EXPENSES

All Agency operations are funded by assessments against the institutions of the Farm Credit System. Obligations are incurred within fiscal year budgets as approved by the Farm Credit Administration Board.

CAPITAL CORPORATION INVESTMENT FUND

The Farm Credit Amendments Act of 1985 merged the Banks for Cooperatives fund and the short-term credit investment fund, making this fund available to the Farm Credit Administration for the purchase, on behalf of the United States, of capital stock of the Farm Credit System Capital Corporation. This concludes the overview of the Farm Credit Administration's Budget for FY 88. I will be happy to answer questions on any specific issues that the Members may have.

[APPENDIX I]

Administrative Expenses
$ Thousands

Approved by the Farm Credit Administration Board and funded by assessments against the Farm Credit System institutions.

	1988	1987
Budget estimate	$39,420	$39,420

There will be no increase from FY 1987 to FY 1988. Anticipated increase in salary and benefit costs will be absorbed through savings in other areas of expense.

Program
$ Thousands

	1986 actual	1987 revised estimate	1988 estimate	Change 1987 to 1988
Supervision and examination of Farm Credit banks and associations	$ 23,176	$ 39,420	$ 39,420	$ 0
Unobligated balance	$ 7,548			
Budget total	$ 30,724	$ 39,420	$ 39,420	$ 0

[APPENDIX II]

FARM CREDIT ADMINISTRATION EXPENSES

Year	FCA Expenses ($ Amount)	Percentage Increases in FCA Expenses	FCA Expenses as a Percent of Loans Outstanding	FCA Expenses as a Percent of Loans Made
1981	12,796,000	+13.4	.017	.017
1982	14,861,000	+16.1	.018	.022
1983	17,356,000	+16.8	.021	.027
1984	19,646,000	+13.2	.025	.030
1985	19,835,000	+ 1.0	.027	.029
1986	23,176,000	+16.9	.037	.038

FCA CHAIRMAN'S OVERVIEW OF THE SYSTEM

Senator BURDICK. Before we start with the question period, Senator Harkin has arrived.

Do you have an opening statement?

Senator HARKIN. No, I don't, Mr. Chairman.

Senator BURDICK. Mr. Naylor, this is kind of a wide question. Do you have any comments on the financial picture as we see it today?

Mr. NAYLOR. Mr. Chairman, the financial problems of the system are by-and-large concentrated very markedly in several districts, but if I were to look at the most recent fourth quarter figures, the FICB's, which are the intermediate credit banks, did, in the latter part of 1986 begin to show some improvement in their earned net worth and their position, as did the banks for cooperatives compared to their low points about midyear in 1986.

The focus of the problem continues to be the land banks, which continued to deteriorate throughout the year and actually took on an overall negative position on earned net worth by the end of 1986. Those problems are particularly focused in the Midwest and in the Jackson district, and continue to pose very serious operating problems.

The system has taken a number of steps itself to begin to correct some of these problems, including making significant changes in management in key areas, such as Omaha, St. Paul, Wichita. With new managerial direction it is beginning to show some productive results, most notably in the St. Paul district with a very aggressive loan restructuring program that has proved very beneficial to borrowers, as well as the system itself and its operators.

We are by no means out of the woods, the financial condition of the system remains quite serious. The loss is obviously, even though improved from 1986, unacceptably high at about $1.9 billion for this last year.

Clearly, if the system is unable to resolve some of the litigation that it has going on within itself and to resolve some of the overall problems it has in establishing cross-agreements on collateral sharing and some other technical issues, the need to reevaluate and perhaps propose additional legislation may well occur during this coming year.

But it is our view, depending on how you approach that and how you may restructure it, that no hard capital may be necessary although some forms of assistance may become involved.

Senator Kasten alluded to some proposals that have some promise that are under consideration before the system, literally as we speak. There is no reason that this system cannot fully recover, and become the viable lender and the reliable lender that it has historically been. This agency, and I am convinced that this administration, is committed to seeing that happen.

Senator BURDICK. If the losses continue as they have in the last 2 years, do you still say that we don't need the infusion of new hard capital?

OPTIONS FOR THE SYSTEM

Mr. **Naylor**. The system still has about $9.5 billion of resources available to it. The system itself in requesting the 1986 legislation, not this agency but the system, last fall indicated that it was very confident that given additional time, which is what regulatory accounting provided, that it could come up with some reasonable solutions. It might well be able to avoid direct financial assistance. Because of some of the litigation problems and others that we are faced with now, that may not turn out to be the case, but, nevertheless, there are some options available including the ones being considered by the system at this time to solve many of those finanical resource problems internally.

The system may be able to avoid or minimize any requirement for federal assistance, certainly on a hard-cash basis through guarantees or some other considerations perhaps, but hard capital, I think, might well be avoided.

Senator **Burdick**. We understand that there is only about $1.4 billion in surplus. Is that correct?

Mr. **Naylor**. In terms of what is over and above stockholders value, which is about $4.5 billion, yes that is about right, plus about $3.5 billion or so of loss reserves, which can be applied and are being aggressively applied under these restructuring programs and are beginning to have some favorable impact.

Senator **Burdick**. I would like to ask the other members of the board if they want to add anything to what has been said?

FCA BOARD MEMBER DUNCAN

Mr. **Duncan**. Senator, I would concur with the Chairman, that the condition of several of the system's institutions is indeed serious. I recognize, as does Chairman Naylor, that the system has substantial resources available for dealing with some of those problems, if it is able to pull together and utilize those resources effectively.

There are currently some 50 separate legal actions against the agency, most of which relate to aspects of implementation of the 1985 legislation. Those impede the ability of the system, in many instances, to use its resources as effectively as it otherwise could.

I think the Chairman has indicated the role that the Capital Corporation could play in facilitating the appropriate workout of troubled assets in the system and it is my hope that that Capital Corporation, which has been quite slow in getting up to speed, will now be up to speed and will become an effective and constructive force in helping the system work through its financial problems.

Senator **Burdick**. Mr. Billington, do you have anything to add?

FCA BOARD MEMBER BILLINGTON

Mr. **Billington**. There are a number of things that are happening in relation to some of your concerns out there that I am also very concerned about in some districts. These have to do with the breakdown of some of the PCA's and Federal Land Bank staffs out in the country, and with being able to operate an effective credit delivery system. This situation has been brought on by many serious problems. We are trying to overregulate and overreview and look over these people's shoulders. These guys that are out running the PCA's and the people who are out running the Federal Land Bank Associations, are being overreviewed, and we are putting so many paperwork requirements on them, that we are impeding their ability to provide service to the ranchers and farmers out there who need it.

We are trying to alleviate these problems at FCA and we are trying to get the system to look at our examination procedures, to take this information and data, and to use this information in their role in helping the local Federal Land Bank and the local PCA people out there carry out the job that they must do.

Until we can get the retail delivery system built back into this system, like it was in prior times, in Jim Billington's opinion it is going to be extremely difficult for this system to again regain the status it had in the past. I agree very closely with what Senator Grassley says, that this is a great concern. We are looking at regulations to try to get the banks to use our examinations and eliminate some of their own reviews where this is possible, because the farmers cannot afford all the costs that are being put on their backs at the present time, to deliver a loan from that PCA or Federal Land Bank office. I am very concerned about that.

I am also concerned about the cost of operating the district banks and, like Frank says, I agree that we probably have an opportunity to reduce these costs by eliminating some of the bricks and mortar that we don't have to have out there. Because we live in a changing time in agriculture, there are a lot of people who are leaving, the size of the credit out there has been shrinking, and we don't have as much ability to loan money.

Farmers are paying their debts down; they realize the seriousness of trying to carry a heavy debt load because of the high cost. That has to be addressed. These are some of the things that I am concerned about.

I am also concerned about the *Springfield* case that impedes our ability to help the Capital Corporation in acquiring funds. We have some important decisions to make as to the future of this system, which have developed from just that one case alone, and we must address these issues.

We need to try to figure out if we are going to go to the system for additional money. Most of the money left out there is in the hands of the local production credit associations. I believe that $1.1 billion of it is in the hands of the local production credit associations, which were well-managed institutions which had a board of directors out there closer to the people. That is the closest system to the borrower that we have and if we use it as an example then we could say that probably the entities that remain closer to their stockholder borrowers are the only ones that survive and have funds with which to deal. It is very important that we take a look to see how much money we can really pull out of them. The 1985 act has some ambiguities in it as to how much money we should assess, and we are going to have to revisit this problem, so I am concerned also about that. The agency, of course, is working on those problems today.

We are a new agency. If we had the advantage of having 2 or 3 years of exams behind us then we would know more about the system. We are brand new, and we are trying to find out all the problems and get our hands around all the numbers.

We had a full board effective on October 14 so we don't have the luxury of knowing exactly everything inside the system or its problems, and so we are trying to address those at this time.

Senator BURDICK. Mr. Naylor, what is being done to protect the farmer-held stock in the system?

"B" STOCK

Mr. NAYLOR. Mr. Chairman, under the 1985 amendments, if a district bank became impaired in its stock, borrowers stock, it had to obtain hard cash from a neighboring district or from elsewhere in the system to correct that impairment.

The operating system became concerned last summer that it might, because of litigation and other considerations, be impeded while Congress was out of session and as part of the regulated accounting package, which they requested and which Congress very carefully evaluated in the waning hours and imposed some requirements on us to continue that for them later on, provided a means in which as a result of that legislation a district bank, instead of getting hard dollars, could, in effect, make a loan to itself, which essentially came from its borrowers stock value.

That loan, if repaid under a sound operating business plan, which that district bank was required to do in the first place, and if indeed that business plan is carried out, no one will be hurt and no one will know the difference. The impairment would be correct over the 20-year period and the stock, as far as the borrower is concerned, is perfectly sound.

However, if the business plan fails at some point during that period of time, there is the possibility that the remaining borrowers in place in that situation might not get the full value of their stock back.

One of the requirements and concerns which Senator Cochran and others had in asking us to make sure full disclosure was made, is that we, in effect, were changing the rules, and to require, as an agency, that if a district elected this option to correct an impairment, then they had to make full and complete disclosure to their borrowers.

The rules have been changed and, while however remote it may be, there is a different situation here than there was before. Disclosure to borrowers is being made now in the districts that have elected and are electing to use this option. It also offers to their stockholders the option of going back to their boards and saying, "We don't want you to use that option. We want you to take other means of correcting that impairment."

I would say though, in my own view, it does not substantially change the exposure of an individual borrower if the operating plans are sound and if we recall that there is a federal backstop as part of the 1985 amendments.

It is a different approach and it does not provide the same hard dollar backing behind stock that was provided for in the 1985 amendments, while it may be equally sound in the end, it does change the way one has to look at it.

Senator BURDICK. Do you think FCA will require districts to dip into their stock?

Mr. NAYLOR. No, Senator. This agency has not and will not in any way be involved in that type of activity.

The only thing you have requested us to do, as Members of Congress, is to ensure that if a district opts to utilize the authority granted by Congress, asked for by the operating system, that we, as a regulator, ensure that the borrower is fully informed that that has been done, and under what conditions.

Senator BURDICK. Senator Cochran.

Senator COCHRAN. Mr. Chairman, thank you.

Soon after the regulations implementing the regulatory accounting principles which were authorized in the Farm Credit amendments of 1986 were issued, we began to hear from some system institutions that the regulations were too stringent, that they didn't really permit them to take advantage of the regulatory principles of accounting.

Have you had that same kind of reaction and, if so, do you contemplate any amendments or changes in those regulations to make them more workable or to permit system institutions to utilize the principles more effectively?

REGULATORY ACCOUNTING PRACTICES

Mr. NAYLOR. Senator, we have had some inquiries. However, at a recent public hearing, we only had one request to appear, and it was withdrawn. We expect that at a public hearing next week, we will have several witnesses there to discuss the regulations with us and their concerns before they become final.

In answer to your question, Senator, you took a leadership role last fall in being concerned about borrower interest rates, and one of the major features of the 1986 legislation was to deal with the concern of reducing interest rates to individual borrowers. We took that very close in mind, all three of us, when these regulations and our staff were prepared.

One of the features of those regulations was a requirement that an institution electing to use regulated accounting with regard to adjusting its outstanding debt costs had to pass through 100 percent of that to its borrowers in the form of interest reductions.

That caused some concern in the system because the only way that we allowed impairments to be cured was by the use of regulated accounting on the loss side of the ledger first, and if that wasn't adequate to correct an impairment, second, request funds from the Capital Corporation, and finally, if that did not cure an impairment, they could request and go ahead and use the portion that had been intended by you, and other Members of Congress, to be used for interest rate reduction to cure an impairment.

There were a number of questions raised about that, but it was our feeling that the emphasis of the Congress was on interest rate reduction to the borrower, so we made it a very specific point of incorporating that into the regulations and giving that a high priority.

What, in fact, has occurred is that very little interest rate reduction has occurred, and the regulated accounting, by and large, has been used for impairment corrective action, rather than interest rate reductions.

Senator COCHRAN. For those institutions which are submitting programs or plans for interest rate reduction now, can you tell us what your plan is in terms of approving these requests for authority to reduce interest rates, and what is the outlook for the future?

FCA NO LONGER SETS SYSTEM INTEREST RATES

Mr. NAYLOR. Senator, as a result of the 1986 amendments, we no longer review those items. They do not send them to us for approval, and we do not approve them.

The program which you made reference to, we commend, and in fact we have encouraged, since any one of the three of us have been on this board, the tiered rate system which the Jackson board apparently adopted at this meeting.

That system, by and large, and I think, Marvin, you have the figures with you, is already in place and has been in place in most districts for some time as a result of strong encouragement from this board, and from many of the leaders within the system.

We expect to see tiered rates and a variety of other interest rate programs beneficial to borrowers continue to be expanded and used, including fixed-rate loans at substantially lower rates than the old variable rates, and a number of actions on their part to obtain a competitive position.

Indeed, we have been advised by some of the system spokesmen that they feel they are already very competitive with their competition in most parts of the country today from an interest rate perspective.

Senator COCHRAN. Jim Billington had mentioned the federal judge's decision in Springfield, Mass. Could you tell us whether or not it is a decision that is adverse to the interests of the Farm Credit System in terms of permitting the lowering of interest rates or bringing stability to the system?

Is this something that is going to postpone the effectiveness of the amendments that were passed by Congress last year?

PENDING LAWSUITS

Mr. NAYLOR. Senator, as my colleagues indicated, we have almost 50 lawsuits pending either against the Capital Corporation, in which we may be a party ourselves, but principally the Capital Corporation, on the ability to share resources, by and large, in one form or another.

On the balance, the majority of courts to date have been in favor of the Capital Corporation and the system's ability to move funds around. The *Springfield* case was not one of the those.

The *Springfield* case lacks some clarity as to the scope and intent of the judge. We have asked the Justice Department to get that clarified.

If that decision does indeed apply to the entire system, and not just to the two districts that were involved in the case, Springfield and Texas, then it does pose potentially some serious questions that we will have to look at, as will the system itself, on its ability to make funds available to those institutions that may require them.

However, the use of regulated accounting does offer some time, and the effect of transfers that have already occurred under the Capital Credit Preservation Agreement still gives us some working latitude that is not totally set aside by a situation like this.

We certainly intend and have already asked Justice for an expedited appeal.

Senator COCHRAN. Thank you.

Thank you, Mr. Chairman.

Senator BURDICK. Senator Grassley.

Senator SASSER. Mr. Chairman, if Senator Grassley would yield for one moment for a unanimous consent request.

Senator GRASSLEY. Please.

Senator SASSER. Thank you.

Mr. Chairman, I ask unanimous consent that my opening statement be included in the record as if read.

Senator BURDICK. Without objection, so ordered.

Senator SASSER. Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF SENATOR SASSER

Thank you, Mr. Chairman. I commend you for holding this discussion on the problems that continue to plague our Farm Credit System. It is my hope we will soon hear some solid solutions to these problems.

When we passed the Farm Credit Amendments Act of 1985, we believed that the legislation would help to solve some of the extreme debt problems which were devastating many of our farm families. In addition, we hoped to bring a measure of relief to the creditors who have loaned to farmers over the years.

Therefore, I am troubled by the evidence before us today. We continue to see substantial losses each year in the Farm Credit System. In 1985, the system had losses of $2.7 billion. Losses of $1.9 billion were reported in 1986. Prospects for 1987 don't appear to be much better. Prices received by farmers continue to fall below the prices received in 1984 and 1985, and farmland values are lower than they have been since 1978.

Our farm economy and farm creditors cannot continue to sustain losses on these levels. We need the help of the Farm Credit Administration, as the regulatory agency of the Farm Credit System, to pinpoint the major problems continuing to create losses in the system and work with Congress to solve these problems in the near future.

I am anxious to hear testimony today which addresses the severe debt problem in the Farm Credit System. It is imperative that we begin to put forth measures which are effective in aiding our farmers' debt problems.

DISCLOSURE AND BORROWERS' RIGHTS

Senator GRASSLEY. I thank you, Mr. Chairman.

As I indicated in my opening statement, Mr. Naylor, I was concerned about stockholders' rights, particularly about some of the forbearance procedures, so I have a few questions along that line. They would come not from the standpoint of policy, but from the standpoint of your regulatory capacity to see that the regulations would be carried out, and the resources behind that.

In your statement, you mention that one of the major problems facing the system is good member relations. Then you went on to say, and I quote, "Members need to be worked on with their loans."

Also in your statement, you mentioned that out of 58,616 nonaccruing loans, about 1,500 have been restructured, and that would be about 3 percent, I believe.

Given that fact, what is your impression of how those regulations are being followed by the system, and whether or not you feel more needs to be done to monitor the process?

Mr. NAYLOR. Senator, we shared your concern, and I still do, on the disclosure and on borrowers' rights. Those regulations, by and large, however, have only been in place since the fall. The system raised a number of questions about many of the details of those regulations, but I think it is our view that they are making every effort to comply with both the spirit as well as the letter of those regulations, particularly in the areas like your own, where we have some management who himself just reported for duty in January.

I think that many people were amazed that borrowers did not know the effective interest rates of their loans. They did not always receive documents or have access to documents in their loan files that they had signed. Generally, they did not have the type of information available to them that people borrowing from other commercial sources did.

The regulations, Senator, which you had a very important role in seeing put into that law, now require that all of that information be provided. We have put very stringent, but no different than the SEC or the OCC requires, disclosure regulations into place with regard to the conduct of business, and regulations of the actions of individual directors and officers are now also in place.

The restructuring decision is one which is not a matter of law, but a matter of just good business. The system, particularly the land banks, has been very slow to get into place effective restructuring plans. But I would say to you at this point that I am very encouraged by the progress and the willingness of a growing number of the district banks to take effective restructuring programs.

One of the most notable restructuring programs is the one just north of you in St. Paul, where a very aggressive districtwide program of loan restructuring has been very helpful to individual producers, and it has received significant attention in a positive sense. We are seeing somewhat similar programs just beginning to become effective in Omaha and Wichita, which are the other two major districts in the Midwest. I think we need, and have an obligation, to monitor and ensure that those programs are carried out to the letter.

In that same vein, we have also put into place strict regulations with regard to local control, and I think all three members feel very strongly about maintaining local control. Regarding the issue of mergers, which our predecessors so strongly pursued and supported, we have changed substantially our view and the agency's view to insist that full and complete disclosure be made to members of the effect of any structural changes, and that they have a full and complete opportunity for information before any mergers or similar actions take place.

I think my colleagues would add to that. That is being watched very closely by all three members of this board and those regulations are being carried out properly.

Senator GRASSLEY. There is a question of accountability, between where does the decision lie, particularly in the Omaha area, between the local board to make a final decision on a restructuring, or does it have to be made in Omaha?

People at the local level say Omaha, and Omaha will say someplace else.

Mr. NAYLOR. Yes; that has been a problem.

Senator GRASSLEY. If you could just answer.

ACCOUNTABILITY WITHIN THE SYSTEM

Mr. NAYLOR. I understand, and this has been a problem that we have had considerable concern about. The new management is dealing with that in these districts. The Wichita district has had a little more time than the new management in Omaha, which we are very pleased to see occur and think is constructive.

The answer is that in the land bank system, the land bank is the lender, and the land bank association is an agent for that land bank at the Omaha level. Ultimately, the lending decision is the land bank's at the district level. To the extent that it delegates authority to its agents, and it varies from district to district, loan decisions are made essentially at the local level.

In the case of the Production Credit Association, however, the Production Credit Association stands alone. It is a private corporation in its own right. It is a primary lender. Only when you have loans that are bigger than its lending limits do you get, in effect, into the position of having the intermediate credit bank either as a supervisor or as a supplier of participation become involved.

Senator GRASSLEY. Now I want to go to allocation of your staff's time, and this would be in regard to $6,285,000 for travel, which I assume is basically for examination and supervisory staff. I would like to know about how much time, would you say as a percentage of their time, your regulatory teams would spend on making sure that stockholders' and borrowers' rights regulations are being carefully followed?

Mr. NAYLOR. Senator, I do not have a breakout of that specific time. It is being looked at by our examination teams.

Senator GRASSLEY. Could you answer in writing?

Mr. NAYLOR. I will do the best I can.

I would be less than honest if I didn't tell you that the bulk of their thrust initially has been the most serious operating problems and major breaches of credit procedure and policy on the effort. We have conducted 40 exams to date, major exams, and most of them have resulted in the need for regulatory enforcement actions.

Senator GRASSLEY. I might read into your comment, particularly since you maybe can't give a more specific one in writing, that maybe there isn't time enough being put in on seeing that the regulations on borrowers' rights are being followed. Would that be a fair conclusion to make?

Mr. DUNCAN. Senator, if I may pick up on that?

Senator GRASSLEY. Yes; you may.

MR. DUNCAN ON BORROWERS' RIGHTS

Mr. DUNCAN. As part of every examination, it is expected that the examiner checks on the quality of the loan portfolio, the appropriateness of the classifications of the loans that that lending institution has made, and whether the lending institution has appropriate reserves against risk in that portfolio. But that is not where the examination stops.

The examination also checks to determine whether institutions are abiding by law and regulation. That picks up very directly on the point you are making regarding borrower rights regulations being part of that examination process, and the examiners do check for compliance in that regard.

Senator GRASSLEY. You agree with that, Frank, then, because that is a little bit more definite statement that these are being looked into than you were willing to make.

Mr. NAYLOR. You asked for an allocation of time, Senator.

Senator GRASSLEY. I did.

Mr. NAYLOR. I can't give you that breakout. Yes, the procedure Marvin outlined is the procedure that is followed.

Senator GRASSLEY. Let's see if we can quantify that in writing, I would appreciate it.

Mr. DUNCAN. We will make an effort.

Mr. Chairman, and Mr. Senator, let me pick up on one other item that the Chairman had indicated.

Chairman Naylor is correct in indicating the responsibilities for loan restructuring decisions in the system. An additional factor is the case where the Capital Corporation has crafted a business agreement with an institution and provided assistance to that institution. In this case, the Capital Corporation manages the work out of the troubled loans and the disposition of the acquired property.

There are two different practices that are currently in place. Either the Capital Corporation will designate personnel in that bank or association to act on those troubled loans and acquired properties under its direction, or it will set up guidelines that the bank or the association must comply with in dealing with those troubled assets.

In the case of the Omaha land bank, the agreement with the Capital Corporation results in the troubled assets being worked out under the direction of the Capital Corporation, and the Capital Corporation has designated personnel in the institutions in the Omaha farm credit district, in the bank and in the land bank associations, for dealing with those troubled assets.

Senator GRASSLEY. Out of $429,000 that is in your budget for training programs, could you tell me about what percentage of that money would be spent training FCA employees to look for places where stockholders and borrowers have been denied rights?

Mr. NAYLOR. That is part of the overall training package, Senator, but I do not have a specific time allocation. I will have to determine that and give it to you in written form.

Senator GRASSLEY. In your plan for the evaluation of employees, is there any sort of consideration given to their knowledge of these issues, and the implementation of rules by the employees when you consider promotions, raises, or just plain whether or not they are going to be hired in the first place?

Mr. NAYLOR. It is part of an overall performance standard package which has stated objectives on the quality of their work. Again, to say that I can give you a specific allocation and the weight of the element, I can't.

Senator GRASSLEY. In that particular case, I am not looking at a quantification. I just want a general comment of whether there is weight given to it, and perhaps I would like to know how much weight is given to it.

Mr. NAYLOR. Absolutely. There is, but again I don't have a specific weight, but we will attempt to provide that indication to you.

[The information follows:]

The Farm Credit Amendments Act of 1985 included an extensive section on the rights of borrowers of system institutions. As part of its ongoing examination process, the FCA examines system institutions to monitor their compliance with these new regulations, as well as with existing consumer credit laws that system institutions have been required to follow previous to the 1985 legislation.

As a result of the 1985 amendments, the FCA developed an examination manual that reflected the new examination authorities, including compliance with these consumer credit laws and borrower rights provisions in the act. All FCA examiners are required to conduct examinations of system institutions in accordance with the Farm Credit Act, the FCA regulations and the FCA Examination Manual.

While we feel these provide a more meaningful indicator of FCA's attention to consumer credit laws than attempts to quantify budgetary and training time, we also note that all new FCA credit examiners are required to complete an extensive credit examination training and testing program that covers the fundamental aspects of FCA examinations. Additional planning and training time has been and will be dedicated to the inclusion of compliance with borrower rights regulations, but given the continued operating problems and poor credit administration found in a number of system institutions, the scope of examinations must often be focused primarily on the gravest problems.

Mr. BILLINGTON. Senator, also, your statement was that we would rate them before determining wages and salary increases, and all of that. We, in the Farm Credit Administration have very little to do with that as far as association personnel are concerned. It is up to the association and the district to rate those employees after our examinations are in place.

We have absolutely nothing to do with salaries in the system, other than the chief executive officers of the district banks.

FCA'S ROLE IN LEGISLATION

Senator GRASSLEY. My last question would deal with assuming, and I think all the reports are out, that it won't be long until there will be help from Congress asked for.

What is your inclination, when you come to Congress for borrowing money for the system, of the extent to which the prime consideration is going to be farmers' needs or a minimal amount to save the system?

Mr. NAYLOR. Senator Grassley, as a regulator, I would not be the proposer of legislation as such. We have already been asked and are prepared to assist Treasury, or Members of Congress, or the system itself, in evaluating options, which they may bring forward if, indeed, legislation comes forward later in the year. We do not anticipate, as a regulator in our present role, to be the proposer of specific legislation.

Senator GRASSLEY. I just wonder, though, if I shouldn't be asking the question from the standpoint that your advice is going to be sought. What sort of advice are you going to give in regard to my specific question?

Mr. NAYLOR. I think that the advice that I would give, Senator, is that our objective has been from the beginning to return the system to being a strong, reliable and viable agricultural lender serving the needs of farmers. Any further legislative effort that doesn't clearly make that possible, without continually coming back to the Congress, is not very useful.

We will put heavy emphasis on what I would call a solution that will really resolve the problems and get this system back on its feet.

Senator GRASSLEY. Thank you, Mr. Chairman.

Senator BURDICK. Thank you.

The Junior Senator from Iowa, Senator Harkin.

Senator HARKIN. Thank you, Mr. Chairman.

Mr. Naylor, on all these charts that were passed out early this morning at a briefing——

Mr. NAYLOR. They are not ours, Senator.

Mr. BILLINGTON. These are the Farm Credit Council's figures.

Senator HARKIN. Then it is from the system banks and not from you. In the charts the system banks passed out this morning, if you look at every chart, from net income or loss to total assets—do you see those charts?

Mr. NAYLOR. I didn't have them, but I have a copy now.

Senator HARKIN. Look at the second one where it says "Total Assets," under "Financial Condition." Then the next one is the securities outstanding. The next one is the total risk funds. Look at the surplus, it has gone from $6.2 billion to $1.4 billion. The next one on the financial condition, capital by bank group. The components of net loans, the next one. The nonaccrual loans and the loan losses, see how they are going up?

By every indication on every one of these charts, the system is headed for a crash. I mean, it looks like it is in big trouble, and yet what I hear you saying is that you haven't made up your mind whether or not you are going to be coming to Congress for any assistance.

We have a time deadline, too. By April 15, the budget is supposed to be done and the budget resolution. If you are anticipating any kind of request to Congress for any kind of assistance, I think that you should be forthcoming with it now. Yet, what I hear you saying is that you still have not made up your mind whether or not there needs to be any federal assistance. Is that your position?

LEGISLATION IN 1987

Mr. NAYLOR. No, Senator. I think I indicated earlier that it was our view that if the system does not resolve some of the litigation with which it is currently wrestling, and if it does not resolve some internal decisions on the handling of collateral and some other matters of importance to us, the probability of them needing additional legislation this year is significant, but it is not clear whether or not hard capital will be required. It probably might well not require hard capital to resolve the situation.

With regard to your basic question, the system does have significant resources left. The system itself, the same people who gave you the charts, indicated that if they are given the opportunity to effectively use the regulated accounting provided by Congress last fall, that they may well be able to resolve a significant number of their problems.

They currently have groups at work developing their business plan. There are board meetings going on at this very moment in the operating system to determine what they are capable of doing and what, if anything, they may come to Congress for.

We do not, Senator, expect as a regulator to be the proposer of legislation. That would come either from the operating system itself to Congress or the executive branch.

Senator HARKIN. What do you think they ought to do, Mr. Naylor?

Mr. NAYLOR. Senator, there are fundamental operating problems, which the system is working on, which will have to be dealt with more expeditiously if you are going to do anything to effectively get this system back in an operating condition. We alluded to those a little earlier in our opening statement, four principal operating areas:

The nonaccruals, which are a major impediment to system health, have to be more aggressively dealt with. The system is making progress but we think that they need to make much better progress to materially change its position.

Its ability to deal with operating overhead, which is at the same level it was several years ago; continuing to make loans, for example, Senator, and one example that I can cite you, not your district, so I won't single yours out, the minimum size PCA loan, which can be made in one of your neighboring districts and break even at the current operating costs, bricks, mortar and salaries, is a $43,000 loan.

Only 25 percent of the loans it makes are that big, which means that every other loan it puts on the books, even if the bank was operating cleanly, it is putting on the books at a loss. A change is needed in the way we go about making credit, treating smaller loans as consumer credit, for example. Those are fundamental changes that have to be made very quickly.

The high cost of debt that it still has on the books is a major problem. There are not any easy solutions, but there are solutions to that.

Each of those would have a major impact on any assistance that might be needed, and the system has not yet given us the answers, or you, or the executive branch, as to how they are going to deal with those, but they have indicated that they are going to do that shortly.

RESTRUCTURING LOANS

Senator HARKIN. When you say that the banks have to accelerate the process of these nonaccrual loans and expedite their handling, what I hear you saying is that they have to sell farmers out sooner than they do now.

Mr. NAYLOR. On the contrary, Senator. I think a much smarter proposal and a much better one that we are seeing districts use much more effectively is restructuring of loans, and keeping the farmer out there. Effective restructuring programs are beneficial to everyone concerned if they are done correctly, and the system's use of that is a major concern of ours.

FCA NOT PROPOSING A MERGER OF OMAHA DISTRICT

Senator HARKIN. We have a floor vote, but I would like to follow up on that point.

If what you say is so, then what are you going to do with a system like Omaha, which really is in serious shape?

If, in fact, there is not going to be risk sharing among the different regions, what are you going to do with someone like Omaha, how are they going to survive?

I was out there last week. If I remember right, the Omaha Bank said it now has 500,000 acres in inventory, much of which is in Iowa. That amounts to an area the size of one county in Iowa.

What are you going to do with the Omaha system? Are you going to merge it with something else?

Mr. NAYLOR. No; we are making no such proposal, Senator. The issue here is, one, whether the management is dealing effectively, and they do have new management now that I think has a real chance of doing that effectively, and whether they effectively deal with those operating problems themselves.

They clearly, because of their financial situation will need additional capital before they can stabilize their operations, which would either have to come from system or other sources. The Capital Corporation is now, as Mr. Duncan indicated, managing the troubled assets for that district, and is responsible for the restructuring or the sale of inventory property.

Restructuring the loans, problem loans, where the borrower is still there, where the land has already been put in inventory status to deal with the extremely difficult decisions, frankly, Senator, that they are faced with, on the one hand, the desire to keep it in the hands of the farmers and the producers who are in that area, and on the other hand, keeping in mind that that association is owned by the farmers and to continue to carry that property is costing all farmers in that association money.

It is a decision that is extremely difficult to balance within the banks. It is not something that this agency decides. It is a tough decision that those district banks or the Capital Corporation are having to decide.

Senator HARKIN. I guess we have gone full circle with this thing. I hate to belabor the point.

Again, the debts and the writeoffs are taking place at the farmer level. They are the ones who are bearing the brunt of it. I heard you say that you are not going to go to the stockholders, but it looks like the farmer-owned stock is going to be depleted also in some of these banks. The farmers are going to take a loss on the stock that they have, but the bondholders are going to be made whole. I just don't think that that is fair.

I have said that to you before, and I still keep saying it, it is not fair that in a system that sold its bonds in the marketplace, unsecured by any government entity, with purchasers knowing that they were taking a risk, the bondholders will be made whole, while the farmers themselves are the ones that will have to pay the debt.

I just don't think that it is fair, and I would hope that any kind of a solution that is forthcoming would ensure that all entities, government, farmers, and bondholders all have to bear some proportionate share of the losses that we are incurring.

REGULATORY ACCOUNTING PRACTICES

Mr. NAYLOR. As you recall, in the 1985 amendments, one of the key features was the expectation that the repayment ability of borrower stock was protected by the requirement that impairments be cured by transfers of hard cash.

Senator HARKIN. Yes.

Mr. NAYLOR. The 1986 amendments modified that somewhat, but there is still a reasonable expectation in most cases that through the business plan of the district, or through the backstop ultimately that the government provided in the 1985 amendments, borrower stock retirement will be secured in virtually all cases.

In the case of the investor, the tough question that you and I both know we have to deal with is, if this system is going to be alive, if you are going to keep it as a viable system, you have to have people who are willing to invest in it. The first time you tell them that they are not going to get their money back, we are not going to have people giving us money to loan out to the producers. It is a very tough position to be in. We are interested in both situations.

Senator HARKIN. Perhaps we need a new direction and new kind of a system then, one that might secure some of this security for future bondholders if that would help.

Just one last thing that I would like to know. You have no plans yet, to come to us for a bailout?

Mr. NAYLOR. Not this agency, and I would not expect, as a regulator, that we would be a proposer of legislation. That role was not retained by the agency in the 1985 amendments, it was given to the system itself, the operating system. So it would either be the operating system, the members themselves, or the executive branch that would propose any legislation.

Senator HARKIN. Thank you very much, Mr. Naylor.

The subcommittee is going to have to stand in recess because we have a vote on the floor. Senator Burdick will be back in just a couple of minutes.

[A brief recess was taken.]

CAPITAL CORPORATION PLAN

Senator BURDICK. The committee will be in order.

Senator Kasten.

Senator KASTEN. Mr. Chairman, thank you very much.

I want to, if I can, Mr. Naylor, spend a minute or two on one part of the system's problems, which I think is bad assets; the other problem being essentially the high interest debt that the system has. It is my understanding that the Farm Credit Capital Corporation is going to be announcing its plans to begin buying the bad assets of the system.

They will begin with Wichita, Omaha, and then the Jackson districts. Then the Capital Corporation would acquire all of the system's bad assets within the next year or so.

The Capital Corporation would, as I understand it, borrow money to do this by selling 8- to 10-year zero coupon bonds, and that would take the system's bad assets off of the books and improve the system's financial condition. That is the idea.

My question is, have you had a chance to discuss this plan with the Capital Corporation? Without going into all of the details, do you believe that it will work? Lastly, what are the strengths and the weaknesses of the plan which the Capital Corporation is now going forward with?

Mr. NAYLOR. Senator, we have not had the opportunity to look at this plan, and we are waiting to see what action, if any, the board takes and forwards to us for evaluation.

The 1985 amendments clearly contemplated that the Capital Corporation could indeed purchase and manage troubled assets on behalf of the system, and that there was some benefit in taking that approach, having some centralization and uniformity in the way that the most troubled assets were handled within the system. Under certain circumstances, putting a bank into what we would call a clean-bank status, would make it perhaps in a much better position to serve individual borrowers and the farming community at last.

Without taking a look at the specific proposal, and knowing exactly what they have in mind, Senator, it would be unfair for me to comment further until we have an actual look at the specific proposal which we haven't seen yet.

Senator KASTEN. As I described the concept, though, as I understand it, that has your general approval. Marvin just spoke a minute ago about some of this going on even without the Capital Corporation making the major move that I understand that it is about to make.

I just want to know, are you for or against the overall concept as I have described it?

Mr. NAYLOR. Conceptually, that process has a lot of potential to it.

I shouldn't be the only one to comment, and perhaps Marvin would like to comment also.

Mr. DUNCAN. Mr. Senator, I think that the concept you have proposed does have some merit, and I am speaking as an individual and not for the board because the board has not seen a proposal of this sort for consideration.

To focus the troubled assets or locate the troubled assets in one workout institution, where the attention of that institution can be focused on working those assets through in a fair and uniform fashion, has some merit in my judgment. Moreover, relieving the operating bank of its troubled assets so that it can redirect its attention to making and managing agricultural credit, I think, has some real merit.

Senator KASTEN. I appreciate your answer. I also understand the situation you find yourselves in, without having an official review. I have had an opportunity to try to look at this whole set of issues. Especially when you look at some of the numbers here—you said that 1,500 of the 58,000 nonaccruing loans have had some people pay attention to them, and they are trying to work toward some restructuring—these numbers are just impossible to try to continue to work with.

Hopefully, we could get everybody working, including the Capital Corporation, and have the banks concentrate on the bank loans, and work the other ones out. What we are hoping for, of course, is that this would mean that system bonds might be a good investment for the investors and farmers would still have that vital source of credit. It also could turn out that we wouldn't need a huge infusion of cash into the system down the line.

That is my second question. No matter what we do—and let's just assume that this system goes forward and it works well—we still have preexisting high interest debt and we still have a percentage of difficult loans.

DOLLAR AMOUNT OF OUTSIDE ASSISTANCE

What, in your estimation, Mr. Naylor, is the system likely to need—in terms of a dollar amount of financial assistance—from the government in order to prevent the impairment of borrower stock or a collapse of the system itself? Do you have a dollar amount that you can give us?

Mr. NAYLOR. Senator, without looking at a particular proposal, there is almost no way that you can assign a dollar figure to anything. It ranges, very realistically, from perhaps not needing any hard capital at all, to maybe some backstop and reassurances, perhaps even in the form of guarantees. Figures become very high in terms of literally billions of dollars if you don't take the appropriate corrective steps in the way the operations are being carried out.

Until we can see, for example, what the proposal you are talking about looks like and how much it can accomplish, it is almost impossible for us even to venture a responsible guess as to what realistically might be needed.

LEGISLATION

Senator KASTEN. I just want to make the comment. It is my understanding that Senator Harkin was talking about this set of questions and issues a few minutes ago. I just want to say that you, the Farm Credit Administration, and really the whole system, I think, ought to understand that you can't come barreling into Congress in the last couple of weeks of the session and try to get an assistance package into a continuing resolution.

It is real money, and I think that we are prepared to help you with real money. We are probably going to have to waive points of order under Gramm-Rudman and the Budget Act. We are going to have to take some difficult legislative steps. I think that you and the system are going to have to, first of all, sit down with one another, and then with those of us in Congress who want to work with you, and who have been dealing with farm credit issues, to basically hammer out a plan for federal assistance.

I think that we need to do this sooner rather than later. The FCS will be taking a big risk, I believe, by coming to us at the last minute again.

It can't be done that way, in my view, this time. We have a problem. The Capital Corporation is going to step forward and deal with part of it. But we also have a dollar problem that we are going to have to work with.

If this system is going to make it through, it is going to mean that you and the others on your side of the table are going to have to be forthcoming and come to us and say, OK, here it is, because we are prepared to help you. We want to work with you. We want the Farm Credit System to survive and, in fact, to improve significantly over some of the actions that we have seen lately. I hope that we can do it sooner rather than later, and in a businesslike deliberate atmosphere, and not in a crisis atmosphere.

Mr. NAYLOR. Senator, I appreciate very much your statement, and I think that it is absolutely on the mark. I think that my two colleagues and myself, even though some might have preferred that we had not done so, have raised the flag that there are conditions that do exist that warrant serious consideration, perhaps even the need of legislation. It is important that we do this, if it becomes necessary, in a responsible fashion.

We, as an agency, are already working with the appropriate parts of the executive branch, and the General Accounting Office, and we have been working with the various oversight committees as well as the system. We will continue to do so, and to provide the best analysis and evaluation of any proposals that are being brought forward that we are capable of doing. We stand ready to carry out that responsibility.

Senator KASTEN. Thank you.

I thank you, Mr.Chairman.

ACQUIRED PROPERTY

Senator BURDICK. I would like to ask one more question, Mr. Naylor.

Recently, a plan was announced in North Dakota and several other states by the St. Paul Farm Credit Services to sell off parcels of land, 531 specifically in North Dakota, totaling almost 187,000 acres, that the Farm Credit Services had acquired. These parcels are being sold for interest rates as low as 4.9 percent, and ranging up to 8.9 percent.

Can you tell me why these lands are being sold at these low interest rates, and the former owner or the current owner is not given the same privilege?

Mr. NAYLOR. Senator, I cannot address that question as specifically as I think you might like, because the decision on interest rates, the terms of the loans, and so forth, are a decision which was given back, and is specifically given to individual district banks and their associations, and they do vary substantially from district to district. The agency is concerned with the safety and soundness of those operations, but we do not make those decisions.

The program you address, however, I think, addresses a very fundamental dilemma the district banks and the association borrowers find themselves in. The cost of carrying acquired property is very high, and that cost is paid for by the remaining borrowers in that association in the form of higher interest rates and higher costs to them. As long as that land is not resolved—resolved favorably in some fashion—it is adverse to the remaining borrowers in the association.

On the other side of the coin, it has always been, and it was clearly the case in the legislation which Congress passed, the desire that wherever possible that land, when it became acquired, goes back to individual producers. Indeed, I think the efforts are directed at selling those properties first to producers, and only alternatively to any other potential buyer.

I know that there are frequent assertions made that if the interest rates that are being offered in this case were offered to the prior owner, they could have continued to operate. I can't speak to that on specific cases. The assertion has, by and large, been from the associations, and we have no strong evidence to the contrary, that that is not the case.

The individual, who reached the point where the property had to be taken into inventory, was in such serious financial condition that no adjustment on the loan, no restructuring of the loan, would have made it viable for that operator to continue.

That, I think, will be more definitively the case as these restructuring programs become more firmly put into place, and there is a clear effort on the part of all these land banks, particularly, to make their first priority the restructuring and keeping the producer in place, and only using liquidation as their last resort.

ST. PAUL PLAN

Mr. **Duncan**. Chairman Burdick, may I speak to that as well. One of the dilemmas that the institution faces when it holds an acquired property is whether to continue to hold it, which costs the institution money, or whether to sell it even if that involves a concession.

Banks, lending associations, and the cooperative Farm Credit System are in the lending business, not the property ownership and management business. If they are going to sell that property, they want to find a way to sell for top dollar so that they do not further depress land values in that area, causing further reductions in land values on their borrowers' and other farmers' balance sheets.

One way of doing that is to provide a preferential interest rate for a limited number of years. That is what the St. Paul plan has proposed to do. Moreover, with the St. Paul plan, the higher the downpayment, the lower the interest rate. They adjust the interest rate to the size of the downpayment, believing that it is better for the remaining borrowers in the system if the bank sells the property in such a way that the property is sold for top dollar and does not drive down land prices in that neighborhood. That is the objective. It is a difficult dilemma, and a difficult set of issues that have to be balanced in that process.

Senator **Burdick**. It is awfully difficult for me to explain that to farmer Y because they will sell it to this third party at a lower price than they will sell it to the original owner. They will not let the original owner be a purchaser at that time.

Maybe the third party can make a larger downpayment, or something, but I am sure the total selling price is the same, is it not?

Mr. **Duncan**. My understanding is that the strong effort in St. Paul is to sell it to farmers, and to try to sell it to the farmers in that area first.

Senator **Burdick**. To sell it to a farmer, but not to the original owner.

Mr. **Duncan**. I think that this is probably correct, although I cannot verify that. I think Chairman Naylor is probably again correct in that foreclosure is the last resort and only occurs when there is no other way of working out the loan with the borrower.

Our view is, as we have expressed before your committee today, that the system ought to be aggressively and effectively engaged in restructuring loans, understanding that there may be some loans that cannot be restructured. When that happens, it is a tragedy for the farmer involved, but it may be an inevitability, a business inevitability if the loan cannot be restructured.

If the property comes into the ownership of the land bank, then it is in the interest of every farmer in the area that land be sold for top dollar so that it does not drive down land values and, indeed, may even bring some stability to land values. I think that this is the set of goals that the St. Paul program is attempting to achieve.

SALE OF ACQUIRED PROPERTY

Senator Burdick. With regard to this farmer who has lost his land, he looks at this new purchaser, who purchased under the same terms, and he doesn't understand why he doesn't have a chance. Do you understand that one?

Mr. Duncan. Yes.

Mr. Naylor. Senator, absolutely, there is no question that when this circumstance occurs, it is a tragedy for that operator. They may not have all the factors involved in that particular case, we often do not.

Then the emotion of the business, and the family residence, those of us who grew up in agriculture well understand how closely we get tied to our land, and how difficult it is when business reverses take us to a point from which there is no practical recovery, except to leave that business and residence.

I think that all of our people, certainly our agency, are very sympathetic to that. I think that my colleagues are very sympathetic to it. What we are trying to encourage, and I think we are beginning to see some results in, are programs that, indeed, accomplish this in the best fashion possible.

SUBMITTED QUESTIONS

Senator Burdick. I want to thank you, gentlemen, for appearing today. We have some additional questions from Senators Bumpers, Chiles, McClure, and myself. I trust that you can respond to those questions in writing.

Mr. Naylor. We will do that.

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR BURDICK

SYSTEM FINANCIAL CONDITION

Senator Burdick. Just yesterday, the System announced $1.913 billion in losses for 1986. Given these losses, how much money remains in the System?

Mr. Naylor. The Farm Credit Corporation of America reported total capital in the System as of December 31, 1986, at $5.641 billion, of which $1.453 billion was surplus. The remainder was capital stock and participation certificates.

CERTIFICATION

Senator Burdick. What systems are in place or planned in order to enable FCA to make the certification required before the Secretary of the Treasury can decide whether or not to provide financial assistance?

Mr. Naylor. The FCA is updating forecasts based on 1986 year-end financial data. Revised computer financial simulations models have been developed, economic assumptions defined and individual bank financial performance is being analyzed. The projections will be for each district under various economic scenarios. These will become the base upon which the need for a certification would be determined.

Senator Burdick. How will FCA determine whether the system has used its capital surplus and reserves to the extent that further contributions from, or losses incurred by, system institutions would likely preclude them from making credit available to eligible borrowers on reasonable terms?

Mr. Naylor. Capital assessment and adequacy thresholds were specified in FCA proposed regulations. These regulations were published in the Wednesday, July 23, 1986, Federal Register and comments were received from the public. FCA staff is reviewing these comments to determine if changes to the regulations are in order.

Senator Burdick. What do you consider to be "reasonable terms?"

Mr. Naylor. This term is defined in the proposed regulations, and is being reviewed as a result of public comments received.

Senator Burdick. Will the determination be made on a system-wide or on an institution-by-institution basis?

Mr. Naylor. The determination of whether outside assistance may be needed for the System will be on the basis of the availability of resources in individual institutions which can be utilized for loss sharing purposes and on the FCA's projection of System financial prospects under various economic scenarios.

OUTSIDE FINANCIAL ASSISTANCE

Senator Burdick. What plans have been made regarding the form of aid the amount of aid, and other conditions relating to the aid?

Mr. Naylor. The FCA has been reviewing answers to these questions and studying alternatives, but we are awaiting the results of a financial forecasting project before further developing specific contingency proposals.

Senator Burdick. Do you believe that the amount of aid requested should be sufficient to make the system viable and self-substantiating or should it be only sufficient to operate the system for a specific period such as on an annual basis?

Mr. Naylor. If external Federal assistance is needed, I believe it should be structured such that the System can continue in the future as a viable source of agricultural credit on a nationwide basis. However, the System's current structure and practices are in need of careful evaluation and may require significant changes if Federal funds are to have their maximum effectiveness.

Senator Burdick. What is your current estimate of the amount and timing of federal aid?

Mr. Naylor. Based on the legal requirements for certification as provided by the Farm Credit Amendments Act of 1985, the FCA board cannot certify at this time that the System is in need of outside financial assistance. The Farm Credit Act Amendments of 1986 further cloud the certification process. With the utilization of Regulatory Accounting Practices (RAP), the System technically might not exhaust its surplus capital until well into 1988 or beyond. However, this technicality does not stop me from pointing out to this subcommittee today that it is time for the appropriate parties to begin a serious review of legislative options to support the System.

LEGISLATIVE PROPOSALS

Senator Burdick. Are there proposals that you are considering in order to restructure the system?

Mr. Naylor. As you are aware, Mr. Chairman, the General Accounting Office was instructed last year to prepare a package of options or proposals to improve the System. It is our understanding that these proposals will be delivered to Congress in late March or early April.

It is my opinion that it would not be proper for the Farm Credit Administration, as a federal financial regulator, to propose legislation. We do, however stand ready to work with Congress and the Administration on proposals that may be offered, particularly the technical and financial aspects.

We are aware of several serious legislative proposals being circulated for discussion. These range from consolidation of the System into a centralized national lender, to decentralization into semi-independent institutions without joint and several liability.

Secondary market proposals are also attracting attention. These proposals presently include a System-operated secondary market program and an independent secondary market. It is our opinion that an independent secondary market, with separate agency status outside of the Farm Credit System, would spell the end of the Federal land bank system unless a carefully crafted phase-in period were developed to permit the FLBs to work out of their recent difficulties.

MEMBER STOCK AND LOSSES

Senator Burdick. Is there any possibility or probability that members of the associations will be asked to contribute in order to pay off the losses incurred by the association?

Mr. Naylor. This is a business decision that would have to be made by the association board. The association has several business options available to it, including Regulatory Accounting Practices (RAP) which it could use to defer provisions for loan losses and other specified expenses for a 20 year time period, thereby providing resources, on paper only, to offset any direct cost to association members for losses.

There is a possibility that an association board could decide that the best way to handle losses would be to absorb them and reduce the value of member stock. To date, no association or System institution has elected this business option.

DISCLOSURE REQUIREMENTS

Senator Burdick. Apparently the Farm Credit Administration has issued new financial disclosure requirements for directors of farm credit system institutions. What can you tell me about these regulations?

Mr. Naylor. In March 1986, the FCA adopted final regulations requiring the distribution of financial and operating reports to shareholders. Prior to this, System institutions were not operating under any uniform standards, so there was considerable variation in the reports. These regulations included the disclosure of certain information about loans of elected System directors and their relatives with the reporting institution. The purpose of the regulations was to provide useful information for eligible stockholders to consider in the election of institution directors.

After considering public comment and staff recommendations, the FCA board adopted final amendments to these regulations at its November board meeting. Those regulations appeared in the November 21, 1986 Federal Register.

Senator Burdick. It has come to my attention that some of the directors feel that these disclosure requirements are too broad. The allegations are made that some directors may feel forced to resign because of the disclosure requirements and, certainly, potential directors are not running because of the requirements. What is your reading on the implementation of these disclosure requirements? Are they the same as other disclosure requirements in similar institutions?

Mr. Naylor. The FCA believes that the opposition being expressed in some quarters to the financial disclosure regulations is largely explained by the fact the System banks and associations and their directors are not accustomed to operating under the same set of requirements that apply to other publicly owned financial institutions. As System institutions gain more experience in this area, they will become integrated into the mainstream of business practice.

The requirements of the FCA's disclosure regulations are similar to those adopted by the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Board of Governors of the Federal Reserve and the Federal Home Loan Bank Board for publicly owned banks and savings and loan associations, and by the Securities and Exchange Commission for registered financial institutions.

Senator Burdick. Are you finding that you are losing directors or that potential directors are not running because of the requirement?

Mr. Naylor. System institutions have been, and we expect they will continue to be able to attract qualified persons willing to serve as directors and to make the required disclosures. This is consistent with the experience of commercial banks and savings and loan associations operating in both rural and urban communities.

Senator Burdick. Have you determined that these disclosure regulations do not violate an individual's right to privacy?

Mr. Naylor. The FCA's financial disclosure requirements do not violate the privacy rights of any person under Federal or state laws. The requirements of the other Federal banking regulators have been in place for years without successful challenge on such grounds.

LITIGATION

Senator Burdick. On February 17, 1987, a court ruled that the transfer of money from one district to another was unconstitutional under the law and regulations provided for such a transfer. Have you appealed that decision?

Mr. Naylor. A notice of appeal is being prepared by the Justice Department.

Senator Burdick. Do you intend to?

Mr. Naylor. The FCA intends to pursue the appeal. The regulations which are the subject of the case relate to the authority of the Farm Credit System Capital Corporation to assess System institutions, and were adopted as final regulations without prior comment because the FCA believed it was the intent of Congress that the Capital Corporation be able to operate as soon as possible after it was chartered. Nevertheless, the FCA did solicit public comments on the final regulations. It should be noted that, consistent with that announced procedure, the FCA Board will soon review the regulations and the comments and may make adjustments to the regulations as it believes appropriate.

Senator Burdick. In light of that decision, won't some of the districts be facing more serious financial problems much sooner?

Mr. Naylor. In as much as a decision such as the one made in the Springfield and Texas suit negatively impacts the assessment process, certain districts may indeed face financial problems that would otherwise be alleviated by self-help.

Senator Burdick. What do you plan to do for those districts in the event that the court decisions are adverse to you and are not changed in time to provide for the needed transfers?

Mr. Naylor. As explained in response to other questions, the Regulatory Accounting Practices (RAP) provisions of the 1986 amendments cloud the matter of the FCA being able to certify that the System has utilized its surplus capital as provided for by the 1985 legislation. As a result, and absent any System agreements regarding sharing of collateral, certain institutions may reach a point of being under-collateralized for purposes of going to the financial markets.

MEDIATION PROGRAMS

Senator Burdick. Are you aware of the borrower-lender mediation programs in Minnesota and Iowa?

Mr. Naylor. The FCA is aware of such borrower-lender mediation programs.

Senator Burdick. Is the Farm Credit System cooperating fully with these programs?

Mr. Naylor. The FCA does not examine System institutions to determine whether they are in compliance with such state programs so we are unable to respond. The Farm Credit Corporation of America might be able to answer your question more fully.

Senator Burdick. What is your view of the programs?

Mr. Naylor. The Farm Credit Amendments Act of 1985 put into place procedures under which a borrower from a System institution can obtain review of an adverse credit decision made on his or her loan. Subjecting System institutions to additional procedures, including mandatory mediation, will only serve to further delay the opportunity for the institutions to deal with problem assets, and will likely worsen the financial condition of the institution to the detriment of its strong borrowers.

Senator Burdick. Are they successful in bringing about satisfactory arrangements on problem loans?

Mr. Naylor. We are unable to provide you such an opinion, based on our regulatory reporting requirements of the System.

Senator Burdick. Do they reduce the number of forced foreclosures and bankruptcies?

Mr. Naylor. Again, we are unable to provide you such an opinion, based on our regulatory reporting requirements of the System.

Senator Burdick. What would be your position on legislation mandating your cooperation in these programs and encouraging more states to adopt such programs, with a goal of establishing a national program of mediation for farm borrowers and lenders.

Mr. Naylor. As a regulatory agency, I would not anticipate the FCA taking a position on this issue. It must be remembered that the markets allocate and price credit to various sectors of the economy based on a number of factors, among which are the relative risks and costs associated with collecting that credit. Any measures which would serve to thwart the rights of creditors to full and timely payment of principal and interest on agricultural loans would necessarily have a negative impact on the volume and rates at which lenders would be willing to continue to extend credit to agricultural producers. Such measures tend to categorize farmers as consumers -- a categorization which would tend to justify lenders charging farmers for credit under a rate structure which more closely resembles that charged to consumers, rather than rates charged to businesses.

SYSTEM MEMBERSHIP AND LOAN VOLUME

Senator Burdick. How many borrowers have voluntarily left the System in the past year?

Mr. Naylor. This information is reported by the Farm Credit System, not the FCA, in the form of number of loans, not number of borrowers. Based on System reports, the total number of loan accounts in the FLBs declined from 601,000 on

December 31, 1985, to 517,000 on December 31, 1986. The total number of PCA loan accounts declined from 302,000 to 225,000 during the same period.

Senator Burdick. In the past 2 years?

Mr. Naylor. Again, based on System reports, there were 660,000 FLB and 337,000 PCA loan accounts on December 31, 1984.

During the 2-year period ended December 31, 1986, the number of FLB loan accounts declined by 143,000 and the number of PCA loan accounts declined by 112,000. Although the System's institutions would be the appropriate parties to give you more specific information, it appears that the majority of the decline reflects voluntary action by borrowers.

Senator Burdick. Generally, what type of borrowers are those?

Mr. Naylor. This would include borrowers with sufficient financial strength to either discharge their loans directly or to refinance them with another lender, including Federal credit programs. On the other end of the spectrum, some borrowers might choose to leave the System by deeding back their property used as collateral, in lieu of foreclosure.

INTEREST RATES

Senator Burdick. Because the Farm Credit System was unable, and also not permitted to lower its interest rates when other private interest rates were going down, many borrowers left the System and refinanced with other lenders. Does FCA maintain any type of control over the interest rates charged by FCS institutions?

Mr. Naylor. The Farm Credit Act Amendments of 1986 removed the FCA's authority to approve interest rate programs of System institutions. On October 28, 1986, the agency sent a letter to all Farm Credit System institutions informing them of this change. On December 5, 1986, the agency sent a second letter to all institutions removing agency prior approval requirements on interest rate policies and programs. The only remaining control the agency has over interest rates is regulation 4310 which limits the spreads that production credit associations can charge over the FICB rate to 400 basis points. This regulation is being reviewed. In the course of regular FCA examinations, adequacy of the institution's earnings is reviewed as it impacts the safety and soundness of the institution's operations. Interest rates charged are, of course, a major determinant of earnings.

Senator Burdick. Are System's interest rates still above market rates?

Mr. Naylor. Although the FCA no longer approves interest rate changes by System institutions, we are aware of rates as low as 8.5 and 9.5 percent, as of February 1, for FLB adjustable rate loans. Federal land banks have greatly expanded the use of differential interest rate programs during the past year, allowing them to offer interest rates to borrowers of various risk categories that are generally consistent with rates charged by competing commercial lenders. The standard variable rate FLB loans range from 9.75 to 12.5 percent.

Largely because of their shorter-maturity security portfolios, Federal intermediate credit bank and bank for cooperatives rates are generally following market rates rather closely. Depending on the loan type and terms, production credit association rates are in the 7 to 13 percent range.

PAST INTEREST RATE APPROVALS

Senator Burdick. Please provide the committee with a list of interest rate adjustment requests you received in the past 2 years and your action on them.

Mr. Naylor. A list of interest rate adjustment requests is provided for the period January-October 1986. Prior approval by the FCA was not required after October 1986. No uniform system to account for requests and actions taken existed prior to the passage of the December 1985 legislation. Most records of those actions prior to 1986 are in the FCA field offices. During 1985, most interest rate adjustment requests were approved.

Summary of System Interest Rate Approvals
1/1/86 through 10/31/86*

District	Date Received	Summary of Request	Final Disposition
Springfield	2/19/86	Interest Rate Change Authority request	BC--Approved FLB/FICB disapproved
	3/6/86 Program change	FLB Fixed Rate Loan proposed	Approved
	3/31/86	FLB Differential Interest Rate Plan and Rate Decrease	Disapproved
	8/26/86	FLB/FICB decrease in weighted average lending rate 66 b.p.	Approved
	10/1/86	Reduction in FLB variable rate	Approved 12 basis reduction
Baltimore	3/3/86	FLB Interest Rate Reduction Proposals	Disapproved
	3/28/86	BC Interest Rate Reduction	Approved
	4/10/86	FLB Differential Interest Rates	Approved
	7/7/86	FLB approval to reduce the bank's 30-day variable lending rate to 11.25	Approved
	8/20/86	Reduction in weighted lending rate	Approved
	10/8/86	FLB interest rate reduction	Approved
Columbia	2/11/86	FLB interest rate reduction 50 basis points	Approved
	2/18/86	FLB 25 basis point reduction request	Disapproved
	5/2/86	FICB interest rate extended to 8/1	Approved

District	Date Received	Summary of Request	Final Disposition
Columbia	7/17/86 & 7/31/86	Reduce FICB discount rate from 10.50 to 9.25%	Approved
	8/21/86	FICB requests authorization to adjust the discount rates to South Atlantic PCA to maintain 85 basis point spread over debt cost	Approved
Louisville	3/21/86	BC Interest Rate Reduction and Interest Rate Approval 5215	Approved
	7/25/86	FICB spread decrease---50 basis points	Approved
	7/25/86	FLB reduction in weighed average loan rate	Approved
	9/26/86	FICB/PCAs be excluded from the interest rate limitation set last July	Disapproved
Jackson	1/3/86	Interest rate spread decrease for FICB	Disapproved
	1/24/86	Approval of BC proposed reduction in interest rate effective 2/1/86	Approved
St. Louis	2/18/86	FLB Interest Rate Decrease	Disapproved
St. Paul	3/7/86	Fixed and variable interest rate reductions---10.90-percent 2-year fixed rate and differential variable rate program FLB	Approved
	3/24/86	Request for BC interest rate interest rate & delegation authorities	Approved
	4/8/86	FICB interest rate on 6-months and 1-year loans decrease fixed rate to 9.3 and 9.8 percent	Approved
	7/25/86	Approval of a .50% interest rate reduction for the FLB, FICB/PCA, and BC	Approved

District	Date Received	Summary of Request	Final Disposition
Omaha	2/18/86	FLB Interest Rate Decrease	Approved
	4/4/86	BC Reduction in Differential Variable (Seasonal & Term) rates	Approved
	7/28/86	BC rate reduction	Approved
	9/26/86	BC seasonal and term lending rate reduction	Approved
Wichita	3/7/86	FLB/FICB Interest Rate reductions	Disapproved
	3/31/86	BC Reduction of Variable Interest Rate by 25 basis points	Approved
	5/21/86	BC interest rate reduction & permission to adjust variable interest rates without FCA approval	Approved
Texas	8/28/86	BC decrease in variable seasonal/commodity lending rate	Approved
	9/26/86	BC wants to reduce lending rates	Approved
	9/26/86	FICB reduction in lending rates	Approved
	10/7/86	Reduction in FLB interest rates	Approved on condition
Sacramento	8/1/86	35 basis point reduction in the district's variable rate loans--FLB	Approved
Spokane	2/24/86	BC Interest Rate Adjustment--50 basis point reduction	Disapproved because of insufficient market & financial analysis by bank.

District	Date Received	Summary of Request	Final Disposition
Spokane	4/1/86	BC Rate Change--50 basis point reduction	Approved
	4/23/86	FLB interest rate change --decrease	Disapproved *
	5/21/86	BC interest rate reduction	Approved

*On October 28, 1986, the agency sent a letter to all Farm Credit System institutions stating that the 1986 Amendments to the Farm Credit Act permitted the institutions to set their own interest rates without FCA prior approval.

BORROWER RIGHTS

Senator Burdick. The 1985 amendments require that every board of directors of each Farm Credit System institution establish one or more credit review committees which shall include farmer representation. Has FCA insured that every System institution has a statutory credit review committee?

Mr. Naylor. In a letter to the CEOs of all System institutions February 7, 1986, the FCA directed institutions to implement the statutory credit review committees as required by the Farm Credit Act Amendments of 1985. Final regulations which implemented provision of the Amendments became effective November 28, 1986. FCA examiners will examine institutional compliance with these regulations.

Senator Burdick. In general, who are the members and is at least one farmer-board member participating?

Mr. Naylor. FCA regulations provide that members of each credit review committee are appointed by the institution's board of directors and must be composed of at least one member of the institution's board.

Senator Burdick. How many members are on each committee?

Mr. Naylor. There is no set number of members on each committee.

Senator Burdick. What authority do these committees have?

Mr. Naylor. The review committee has authority to make the final decision of its institution on all applications.

Senator Burdick. Are these committees reversing adverse credit decisions?

Mr. Naylor. FCA does not maintain records on the number of decisions that have been reversed. Insofar as final regulations were only recently effective, a pattern would not yet have been established.

SYSTEM FORBEARANCE POLICIES

Senator Burdick. Under the 1985 Amendments, the Farm Credit Administration is to issue regulations requiring System institutions to develop policy governing FORBEARANCE. Each System institution is to provide its borrowers with a copy of its forbearance policy at certain times. Has the FCA developed a forbearance policy? If so, please provide the committee with a copy.

Mr. Naylor. The Farm Credit Act Amendments of 1985 required the FCA to issue regulations providing for each System institution to adopt a forbearance policy. Regulations 12 C.F.R. 614.4513 issued October 28, 1986, requires each district board and the Farm Credit System Capital Corporation to develop a written forbearance policy and provide copies of it to existing member-borrowers.

Senator Burdick. Has the FCA insured that each district has a forbearance policy?

Mr. Naylor. Final regulations which implemented this provision of the Farm Credit Act Amendments of 1985 became effective November 28, 1986. FCA examiners will monitor compliance with the regulations.

Senator Burdick. Has the FCA insured that the forbearance policies of the various districts are consistent?

Mr. Naylor. Policies are developed by each district board. Regulations 12 C.F.R. 614.4513(c) required policies to address specific areas regarding forbearance. Therefore, in this regard, forbearance policies are consistent.

Senator Burdick. At what time has FCA prescribed in the regulations that a borrower is entitled to receive a copy of the institution's forbearance policy?

Mr. Naylor. FCA regulations published at 12 C.F.R. 614.4513 require each System institution to provide its borrowers with a copy of the institution's forbearance policy at the time the borrower seeks forbearance by making an application to restructure the loan, or at any other time a borrower requests a copy of the policy. In addition, the institution must provide a copy of the forbearance policy at least 14 but not more than 30 days prior to commencing a collection action. Providing the policy at this time ensures that borrowers have an opportunity to formally request forbearance.

Senator Burdick. What is the goal of a forbearance policy? Is it to provide for the farmer in need of forbearance or to provide for the farmer/members remaining after forbearance?

Mr. Naylor. The goal of a forbearance policy ought to be to restructure, reamortize or otherwise compromise on the borrower's indebtedness when it is in the best interests of both the lender and the farmer to retain that loan as a paying account, rather than foreclosing on it. Not every loan can be restructured, but in many cases a reasonable work-out that allows the farmer to continue making partial payments and maintain his operation is of more benefit to both the cooperative lender and the borrower, rather than gaining another nonperforming acquired property on the lender's books.

FARM CREDIT SYSTEM CAPITAL CORPORATION

Senator Burdick. The Farm Credit Amendments Act of 1985 (P.L. 99-205) required the establishment of the Capital Corporation to (1) transfer available System resources from healthier institutions to those in financial stress; (2) acquire and administer nonperforming loans and acquired property, and (3) receive and administer Federal Financial assistance. What problems are facing the Capital Corporation?

Mr. Naylor. The Capital Corporation is faced with the usual staffing and control problems one would expect in starting any new business entity. In the last quarter of 1986, the Capital Corporation entered into agreements with seven Federal land banks and one Federal intermediate credit bank to provide financial assistance and take over management of certain high-risk assets. Assembling the necessary staff and establishing the necessary policies and procedures has been a significant problem. Factionalism within the System as evidenced by the ongoing litigation has also hampered the Corporation's efforts by diverting management attention and creating uncertainty.

Senator Burdick. You indicated in your testimony that in 1986, $1.183 billion was identified for transfer among System institutions through Capital Corporation assessments. How much of this amount has actually been transferred?

Mr. Naylor. Of the $1.183 billion that was identified for transfer, $298 million was assessed in October 1986. Of this amount $123 million has actually been transferred to the Capital Corporation. Ten million of this has been further transferred to other System institutions. These funds represent only the transfers by the Capital Corporation chartered under the 1985 Act.

LITIGATION AND THE CAPITAL CORPORATION

Senator Burdick. To what extent will the 20-some lawsuits which have been filed challenging the transfers, hamper the System's attempt to deal with this crisis?

Mr. Naylor. These lawsuits are basically preventing the assessment process from effectively utilizing System resources as envisioned by the 1985 amendments to the benefit of the System as a whole. This not only hampers the ability of the Capital Corporation to provide the technical and financial assistance to recipient banks, which further slows the needed changes in business operations, but the uncertainty it creates has a negative effect on borrower relations and the confidence factor out in the country.

Senator Burdick. In the foreseeable future, which districts are likely to need financial assistance and when?

Mr. Naylor. The FCA is currently developing a forecast of the financial condition of each bank in the System. The results will be used to identify those districts in the most serious financial condition.

Based on December 31, 1986 financial results, seven FLBs were operating on a GAAP-impaired basis; i.e., their net worth was less than the book value of their borrower stock. These FLBs were in the Columbia, Louisville, Jackson, St. Louis, St. Paul, Wichita, and Spokane districts. These institutions are currently using the regulatory accounting provisions of the 1986 legislation to distribute the expense associated with certain allocations of their reserve account over a period of 20 years. However, the survivability of these banks without financial assistance is dependent on their ability to generate revenues in excess of costs. Economies in operating costs, restructuring of nonaccruing loans, and adjustments in interest rates charged are the primary options open to them. In most cases, it is unlikely that long-term viability can be obtained without financial assistance. The prospects for some of the other institutions in the System may well depend on the economic scenario which emerges. Several alternatives are included in the current forecast study.

Senator Burdick. How are the determinations made as to which districts will sell loans to the Capital Corporation and which loans within each district will be sold?

Mr. Naylor. The Capital Corporation is responsible for determining which loans it will purchase from System institutions that choose to offer their loans for sale. The Capital Corporation has the option of refusing to purchase if it so wishes. FCA Regulation 12 C.F.R. 611.1142 sets broad guidelines for the Capital Corporation's decisions. These guidelines provide only that the Capital Corporation may purchase nonaccrual loans or interest in loans that the institution has placed in nonaccrual status or any acquired property held by the institution. The assets are to be purchased at fair market value.

The Capital Corporation's decisions are its own, but good management principles would suggest a number of factors be considered, including available funds, seriousness of the financial conditions in the institution, and whether a mutually agreeable price can be arrived at. The FCA is responsible for examining the Capital Corporation and will review the Capital Corporation's performance in this and all other major functional areas.

Senator Burdick. How are the purchase prices determined?

Mr. Naylor. The FCA regulations require that assets be purchased at their "fair market value." This is defined as the value determined on the basis of facts that would be relevant to a willing purchaser and a willing seller, both of whom are knowledgeable that the assets conveyed will be converted to cash over some period of time during which the holder will incur some expenses relative to maintenance and disposition. In arriving at this value, each asset is evaluated based on the repayment capacity of the underlying farming operation and the collateral securing the loan. The circumstances under which collection would likely occur--foreclosure, voluntary deed, or restructuring--are also factors.

Senator Burdick. You indicate that the System has $1.11 billion in acquired properties and is carrying $8 billion in non-accrual loans. How many of these properties and/or loans have been transferred to the Capital Corporation?

Mr. Naylor. Since enactment of the 1985 Amendments, the Capital Corporation has not purchased any assets. The predecessor Capital Corporation purchased $268.5 million in loans from the Spokane and Omaha Districts, which, net of chargeoffs and paydowns, amount to $103.1 million. The Corporation is also managing $760.6 million in acquired properties with a net value of $573.3 million. This amounts to 1.6 million acres. The Corporation also manages $3,453.1 million in high-risk loans.

Senator Burdick. What is the value of these loans and/or properties?

Mr. Naylor. The December 31, 1986 value of all loans either purchased or managed net of paydowns and chargeoffs is $4,129.6 million.

Senator Burdick. What is the Capital Corporation doing with the loans that it has acquired?

Mr. Naylor. The Capital Corporation's objective for loans it has acquired would be to return them to a paying basis. This is done by negotiating new terms with the old borrower, and if that is not possible, selling the land or other property to a new borrower.

Senator Burdick. Has the Capital Corporation sold any of these loans elsewhere?

Mr. Naylor. The Capital Corporation has not sold any loans outside the Farm Credit System.

Senator Burdick. What steps does the Capital Corporation take prior to liquidation?

Mr. Naylor. Although we as a regulator cannot speak on behalf of the Capital Corporation or any other System institution, we can describe the general process it would be expected to take prior to liquidation. The Capital Corporation would evaluate the alternatives available, such as a compromise of indebtedness, for example, writing off part of the loan against the cash-flow of the borrower. Then a decision would be made whether to restructure the loan or liquidate the property, depending on which option would be less costly to the lender.

Senator Burdick. Does the local institution have any say in whether a loan will be transferred?

Mr. Naylor. No institution is forced to accept financial assistance from or transfer loans to the Capital Corporation, nor is the Capital Corporation required to take loans offered by an institution. Under the law, the Corporation may require an institution that receives financial assistance to transfer nonaccrual loans and acquired property to it.

Senator Burdick. What happens to the farmer who does not want his loan transferred?

Mr. Naylor. The decision to transfer a loan to the Capital Corporation rests with the Corporation and the institution from which the loan would be transferred, not with the farmer.

Senator Burdick. Once the assigned value is determined for transferring a loan to the Capital Corporation, why isn't that loan simply offered to the original borrower at that assigned value?

Mr. Naylor. After a loan is analyzed and if the best alternative is to compromise part of the debt, it would be offered to the original borrower if he has the capacity to pay and otherwise is an acceptable credit risk. Again, we can speak only in general terms, and not on behalf of the Capital Corporation on specific decisions it may make.

Senator Burdick. How will the Capital Corporation decide whether to obtain the funds it needs to provide additional assistance by assessing System institutions or by issuing obligations on the open market?

Mr. Naylor. The Capital Corporation assessment formula determines the amount available to be assessed, then divides it among the banks and associations. Issuing additional debt on the open market is not an option, as all the banks have joint liabilities on bond sales and therefore must have income to retire the debt.

Senator Burdick. Given the quality of the Corporation's loan portfolio will it have adequate collateral to offer investors?

Mr. Naylor. The quality of the Corporation's loan portfolio would be a problem in supporting a bond issue because of the high loan-to-asset value ratio on most of the loans it acquires.

Senator Burdick. Do you believe that the Capital Corporation is the appropriate vehicle for the provision of Federal assistance or should some other vehicle be established that is not System-related?

Mr. Naylor. I believe that the Capital Corporation is an appropriate vehicle to administer Federal assistance in the event that it would be needed.

Senator Burdick. Does the Capital Corporation have an annual report?

Mr. Naylor. As with other System institutions, the Capital Corporation is responsible for issuing its annual report.

Senator Burdick. How many employees does the Capital Corporation have?

Mr. Naylor. The Capital Corporation has 27 employees. In addition, in those districts where the Capital Corporation is managing assets owned by the banks and associations, there are approximately 600 employees on the banks' payroll who are managed by the Capital Corporation.

FORECLOSURES

Senator Burdick. Can you provide me with information on how many foreclosures have occurred throughout the System within the last two years, both in each individual district, as well as in the Capital Corporation? Can you provide the same information on voluntary liquidations?

Mr. Naylor. The attached tables summarize the number of FLB and PCA accounts in foreclosure and in bankruptcy at December 31, 1986, and December 31, 1985 as reported by the System. Corresponding information is not available for the Capital Corporation.

We do not have information on the number of borrowers who voluntarily transferred collateral security to their FLB or PCA in lieu of foreclosure.

Federal Land Banks

	Number of Accounts in			
	Foreclosure Only	Bankruptcy and Foreclosure	Foreclosure Only	Bankruptcy and Foreclosure
	------Dec. 31, 1986------		------Dec. 31, 1985------	
Springfield	122	67	150	17
Baltimore	137	35	201	55
Columbia	768	87	492	80
Louisville	520	140	331	122
Jackson	339	201	148	110
St. Louis	298	94	441	34
St. Paul	2558	162	525	20
Omaha	1977	485	1416	304
Wichita	1780	343	1398	220
Texas	50	24	30	6
Sacramento	268	69	224	54
Spokane	579	152	411	119
Total	9396	1859	5767	1141

Production Credit Associations

	Number of Accounts in			
	Foreclosure Only	Bankruptcy and Foreclosure	Foreclosure Only	Bankruptcy and Foreclosure
	-----Dec. 31, 1986-------		-----Dec. 31, 1985-------	
Springfield	70	30	43	0
Baltimore	81	34	55	36
Columbia	284	112	422	118
Louisville	310	82	391	137
Jackson	69	21	75	37
St. Louis	1	0	55	0
St. Paul	221	79	237	83
Omaha	145	41	114	8
Wichita	31	124	91	3
Texas	124	37	48	15
Sacramento	210	81	92	62
Spokane	65	39	118	55
Total	1611	680	1741	554

Senator Burdick. How much does each foreclosure cost the system?

Mr. Naylor. As a regulatory agency, we do not require System institutions to separately account for and report the cost of foreclosures. Such information might, however, be available from the Farm Credit Corporation of America, or the System's trade organization, the Farm Credit Council.

FCA'S REGULATORY AUTHORITIES

Senator Burdick. The Farm Credit Amendments Act of 1985 provided additional enforcement powers to FCA to require System institutions to correct its problems. These powers included issuing cease and desist orders when an institution is engaged in unsafe or unsound practices, suspension or removal of directors or officers, and the assessment of and money penalties. Do you believe that FCA is a more effective regulator as a result of the additional powers granted under the Farm Credit Amendments Act of 1985?

Mr. Naylor. The Farm Credit Amendments Act of 1985, as you know, made the FCA an arm's length Federal regulator of the financial institutions of the Farm Credit System. FCA was given the responsibility and authority by Congress to regulate and examine the System on a basis comparable with the other Federal financial regulators.

The FCA now has similar authorities as other Federal regulators of financial institutions, including the power to issue cease and desist orders, to levy civil money penalties, and to remove officers and directors of System institutions.

Under its reorganization, the FCA's principal objective is to assure the safety and soundness of the System institutions and to protect the interests of borrower/stockholders, investors, and the public. The agency does not, nor is it authorized to, participate in the routine management or operations of System institutions. The FCA involves itself in management and operations of System institutions only when the Farm Credit Act or its regulations have been violated, when taking an action to correct an unsafe or unsound practice, or when assuming a formal conservatorship over an institution.

More than 40 institutions of the System have been examined under the reorganized FCA. To date the FCA has initiated 25 enforcement actions including 15 cease and desist orders, 8 formal written agreements and two supervisory letters.

I would note that the Federal financial regulators are formulating recommendations for strengthening their regulatory powers to deal with safety and soundness issues. The FCA is participating in that project and is hopeful that there will be congressional support for favorable action when those recommendations are made, and for supplementation of FCA's related powers on a par with the other agencies.

ENFORCEMENT ACTIONS

Senator Burdick. You indicate that you have issued 15 cease and desist orders, 8 formal written agreements, and 2 supervisory letters.

Mr. Naylor. As of March 6, 1987, the FCA had executed with System institutions six consent cease and desist orders, four formal agreements, and four supervisory letters. Also, the FCA has initiated the administrative hearing process in order to place cease and desist orders on four additional institutions.

As of February 19, 1987, the FCA had pending four cease and desist orders, two formal agreements, and two supervisory letters. The FCA anticipates issuing these administrative actions during March 1987 meetings with the boards of directors of the respective System institutions.

Senator Burdick. How many directors or officers has it suspended or removed?

Mr. Naylor. The FCA has not suspended or removed any director or officer of any System institution under the authority granted by Sections 5.28 or 5.29 of the Farm Credit Act of 1971, as amended.

Senator Burdick. How many fines has it imposed?

Mr. Naylor. The FCA has not imposed any civil money penalties as authorized by Section 5.32 of the Farm Credit Act of 1971, as amended.

REGULATORY ACCOUNTING PRACTICES

Senator Burdick. The Farm Credit Act Amendments of 1986 were enacted to permit the System, during a 30-month period, to write-off some of its loan losses and high cost of debt over a 20-year period. The purpose of this legislation was to defer the need for federal assistance that could be provided under the Farm Credit Amendments Act of 1985. There are many problems that are now surfacing that were not addressed by the 1986 legislation and it does not appear that federal aid can be deferred as contemplated by the legislation.

The 1986 legislation, authorizing the use of regulatory accounting procedures, was intended to delay the need for Federal assistance at least until the end of 1988. We now understand that Federal aid may be required much sooner than anticipated. Why is the 1986 legislation not accomplishing its objectives?

Mr. Naylor. From our perspective, the 1986 legislation is working. We are aware that directors of seven Federal land banks and one production credit association elected to utilize the Regulatory Accounting Practices (RAP) provided by FCA regulations in reporting as of December 31, 1986. We feel that the regulations adequately provide for these institutions to decide whether or not to utilize RAP and defer certain interest expenses for the purpose of rate reductions and defer provisions for loan losses to avoid stock impairment. Noting that a few lawsuits have been filed regarding the FCA's RAP regulations, we recognize that some System institutions would prefer that we had written these regulations differently.

Senator Burdick. The system raises funds for lending purposes through the sale of securities to investors in the financial market. The system securities are backed by its loan portfolio and by certain other assets. Because of the large amount of bad loans in the system's portfolio, and the increased use of borrowed money to fund its operations, some district banks are facing the possibility of not having adequate collateral to back their portion of system debt. There are a number of temporary solutions to this problem such as pooling excess collateral among districts or issuing short-term uncollateralized debt. To date, however, no formal agreement has been reached to deal with this problem. What problem do you foresee in redeeming stock using regulatory accounting procedures?

Mr. Naylor. RAP represents the financial resources of an institution in a manner inconsistent with conventional accounting practice or GAAP. Institutions that are impaired under GAAP may not be impaired under RAP. If a bank or association that is impaired under GAAP follows RAP and offers to retire stock at RAP par, it has made a decision based on a business plan that they will be able to cover the GAAP impairment at a later date.

Senator Burdick. Given that some districts may soon not have adequate collateral to support their funding needs, how do you believe the system should address this problem?

Mr. Naylor. As a part of the self-help actions mandated by the 1985 Farm Credit Amendments Act, System institutions should evaluate carefully and develop contingency plans that would help to alleviate problems with collateral adequacy. These might include inter- and intra-System agreements for the purposes of sharing excess collateral and restructuring loans and other nonearning assets in order to return these assets to profitability.

Senator Burdick. Why have FCA and the system not reached some resolution on this matter?

Mr. Naylor. In keeping with the statutory requirements of the Farm Credit Act of 1971, as amended, the FCA has no alternative but to require that System institutions be adequately collateralized in order to continue issuing certain debt instruments in the nation's financial markets. Because of their joint and several liabilities, the resolution on collateral sharing agreements is one to be reached between the System institutions, in particular the 37 banks that issue the System-wide consolidated notes and bonds.

Senator Burdick. Would you outline for this committee what you think needs to be done to ensure that there is available credit for creditworthy farmers?

Mr. Naylor. I think that creditworthy farmers are best served by efficient, soundly-managed, competitive sources of credit. From a public policy perspective, that means providing the necessary credit delivery mechanisms and assuring that they are properly regulated in the interest of safety and soundness. A cooperative lending network such as the System can and should, in my opinion, meet the agriculture sector's need for credit.

Senator Burdick. Do you believe that the Farm Credit System can become profitable and, if so, under what circumstances?

Mr. Naylor. Yes, I do believe that the System can again become profitable. As stated in my written testimony, from a regulatory perspective, I see four major problems it must address in order to do so. These are its non-earning assets, excessive administrative expenses, outstanding high-priced debt, and member relations.

FCA ORGANIZATIONAL STRUCTURE

Senator Burdick. Please describe the current organizational structure of FCA, i.e., the various divisions of the agency and the specific responsibilities of each.

Mr. Naylor. Under the Office of the Board, the agency has six offices. These offices and their responsibilities are as follows:

The Office of Examination which is responsible for planning, conducting, and issuing reports of examination on the institutions of the Farm Credit System.

The Office of Analysis and Supervision which is responsible for supervising, setting standards, enforcing regulations, collecting data and conducting analytical and economic studies of the System.

The Office of the General Counsel which is responsible for advising the agency of legal matters.

The Office of Administration which is responsible for providing administrative management and services for the agency.

The Office of Congressional and Public Affairs which is responsible for agency relations with the Congress and public information activities.

The Office of Internal Audit which is responsible for conducting an agency internal audit program.

Senator Burdick. How have these responsibilities changed since the Farm Credit Amendments Act of 1985?

Mr. Naylor. The current organization structure was put in place in June of 1986 after I became Chairman. This structure addresses the requirements and intent of the Farm Credit Amendments Act of 1985 by consolidating and expanding the Agency's examination capability in the Office of Examination; consolidating the supervision, analytical, and new enforcement responsibilities of the Agency in the Office of Analysis and Supervision, and brings the Office of General Counsel into a line capacity in recognition of the Agency's expanded regulatory authorities.

FISCAL YEAR 1988 BUDGET

Senator Burdick. Mr. Naylor, your budget proposed for 1988 is $39,420,000 and you take credit for proposing that is not higher than fiscal year 1987 and indicate that it is indicative of your hard-line approach to the management of financial resources. However, the FCA's budget has increased dramatically over the last few years. In 1986 you were allowed a budget of $30.7 million; however, apparently, you did not need that amount, and $7.5 million is listed by you as an unobligated balance. That $7.5 million was refunded to the System members -- is that correct?

Mr. Naylor. That is correct.

Senator Burdick. Is it possible that you will not need the entire amount this year like in 1986?

Mr. Naylor. It is likely that the FCA will not expend the entire amount. Until we have sufficient experience operating under the new legislation, our budget estimates cannot be as precise as we would like.

Senator Burdick. At what point will you be able to tell us exactly how much is needed, and whether you expect to turn any money back again, or at least maintain an unobligated balance going into next year?

Mr. Naylor. We will be able to provide that information May 31.

FCA'S REGULATORY EXPENSES

Senator Burdick. What was budgeted for each of these divisions in fiscal year 1986, fiscal year 1987, and how does this compare with fiscal year 1988?

Mr. Naylor. The information is presented in the following chart.

Budgeted	In Thousands		
	FY'86	FY'87	FY'88
Examination	14.146	20,501	20,962
Analysis & Supervision	3,098	3,958	4,286
General Counsel	697	955	1,110
Administration	5,543	6,547	5,805
Cong. & Pub. Affairs	624	548	523
Internal Audit	467	329	354

Senator Burdick. Please provide the committee a breakout of FCA's expenditures by Farm Credit District.

Mr. Naylor. Fiscal Year 1986 expenditures by Farm Credit district are as follows:

Springfield	$ 930,755
Baltimore	1,272,695
Columbia	2,029,939
Louisville	1,754,478
Jackson	1,211,682
St. Louis	1,705,748
St. Paul	3,094,641
Omaha	1,822,411
Wichita	1,819,002
Texas	1,681,391
Sacramento	2,920,293
Spokane	1,480,145
Central Bank for Cooperatives	1,262,745
	$22,985,925

Senator Burdick. The budget proposes a continuation of the staffing increase to respond to the increased supervisory responsibilities of the 1985 amendments. What is the agency's current staffing level and when do you expect to attain full staffing?

Mr. Naylor. As of February 17, 1987, we had 507 full-time permanent on-board and 7 commitments. We are within 10% of our currently authorized strength of 573. We expect to be at full strength by mid-summer 1987.

Senator Burdick. The loan volume of the Farm Credit System continues to decline dramatically, down by over $20 billion in just the past few years. What loan volume does your budget request assume?

Mr. Naylor. The FCA budget is not based on the loan volume of the Farm Credit System. The number of loans, size of loans, and the number of entities and their financial condition are more significant in setting the workload of the Agency and correspondingly its needs and budget. Loan volume is only a very general indicator of the size of the total System which does not represent the responsibilities of the Agency to regulate and examine its many parts.

Senator Burdick. If the loan volume continues to decline, can the committee assume that the funding requirements of FCA will also decline. If not why not?

Mr. Naylor. No. Loan volume is not a true indicator of the work requirements of the FCA. Loan volume may continue to decline but, as you know, the number of nonperforming loans and the amount of acquired property has grown rapidly in the past three years. These conditions, which cause a greater examination burden; the number of institutions to be examined; and associated regulatory activities are more relevant indicators of the continuing need for Agency resources.

FCA FIELD OFFICES

Senator Burdick. What is the status of your field offices?

Mr. Naylor. Eight of our ten field offices are operating in leased facilities while the Sacramento, CA and Albany/Troy, NY offices are in temporary space. They should be in leased offices by mid-year.

Senator Burdick. Where are they located?

Mr. Naylor. Oklahoma City, OK
Omaha, NE
Louisville, KY
Sacramento, CA
Atlanta (Marietta), GA
Dallas (Irving), TX
Albany/Troy, NY
Bloomington, MN
St. Louis, MO
Spokane, WA

Senator Burdick. Are they all fully up-and-running?

Mr. Naylor. With the exception of our Albany/Troy office, the field offices are fully up-and-running. We are still in the process of staffing the Albany/Troy office.

STAFFING NEEDS

Senator Burdick. How does your turnover rate for examiners of 15-20 percent annually compare with the turnover rate of examiners in other agencies?

Mr. Naylor. When our budget was submitted last year we estimated our turnover for examiners would be in the range of 15-20 percent. At that time, we had no valid data because, as you know, we started to increase significantly our examiner force just a year ago. After a year of intensive recruiting and hiring, we know we have already lost 11% of the new examiners hired in 1986. This could be compared to the turnover rate of 11.5% at the Comptroller of the Currency and 8.4% at the Federal Deposit Insurance Corporation. However, the examiner ranks at OCC and FDIC are relatively mature when compared to the FCA. Our new examiners, including a large percentage of entry-level trainees, have been heavily involved in training for the past several months. These people are just now becoming operational and subject to the unusual requirement to travel 70% or more which is necessary for our jobs. This is considerably more travel than required by OCC and FDIC and we believe it will produce higher turnover rates.

Senator Burdick. How many associations are there, by district, in the Farm Credit System?

Mr. Naylor. There are a total of 389 associations, of these 233 are FLBAs and 156 PCAs. Combined numbers by district are: Springfield - 36; Baltimore - 53; Columbia - 21; Louisville - 15; Jackson - 3; St. Louis - 25; St. Paul - 51; Omaha - 34; Wichita - 33; Texas - 72; Sacramento - 42; Spokane - 4.

Senator Burdick. If there are further consolidations of associations will that result in a decrease in FCA's operating expenses?

Mr. Naylor. Consolidation of associations will not necessarily result in a reduction in the number of branch offices or assets that need to be examined. Therefore, it is not anticipated that consolidating associations will result in a decrease in the FCA's operating expenses. However, should significant levels of consolidation occur accompanied by an increased reliability of reported financial data, the opportunities to consider reductions in operating expenses certainly appear likely.

FCA EXAMINATIONS

Senator Burdick. What is the present frequency of examination of system associations? Will the frequency of examinations increase or decrease under the proposed budget for fiscal year !988?

Mr. Naylor. The Farm Credit Act of 1971, as amended, requires each System institution to be examined at least once a year. It is anticipated that the frequency of exams will increase for those institutions that are operating under enforcement actions where, due to operating conditions, FCA examiners must closely monitor the financial viability and/or solvency through examinations conducted more often than once each year.

Senator Burdick. What is the optimum frequency of examination of system associations?

Mr. Naylor. The optimum frequency of examination varies by type of institution, financial condition, operating environment, and economy. For example, prior to the 1985 amendments, the examination period for FLBAs was changed from 18 months to every 36 months. The FLBAs act as agents for the FLBs and the loans made through the FLBAs are carried on the books of the FLBs. Therefore, loan losses did not have a material impact on the FLBAs. The FLBs have their own internal controls for the FLBAs and FCA's annual examination of the FLBs included an audit of the delegation of these controls to the FLBAs. Therefore, the optimum frequency of the examination of FLBAs could be materially different than production credit associations (PCAs) which, as direct lenders, are sensitive to loan losses due to the financial condition.

Senator Burdick. What is the frequency of examination of other federal financial regulators of the institutions they regulate?

Mr. Naylor. From my knowledge of other regulators, examinations of the institutions they regulate are not required to be done on a yearly basis. These regulators act more in a supervisory capacity and concentrate examinations on the most vulnerable institutions. Other financial regulators rely more heavily on offsite monitoring and surveillance to augment the examination and supervision of financial institutions.

Senator Burdick. I understand that several associations are being reviewed by FCA and being visited by the GAO, the Farm Credit System Capital Corporation, their own auditors, and auditors from the district bank. In addition to each of these, organizations are requesting data from the associations. This puts a tremendous burden on the employees of the local association, increasing costs and decreasing the productivity of the local office. As the system's regulator, what are you doing to bring order and review to the process?

Mr. Naylor. To fulfill its regulatory mandate, the FCA requires System institutions to report financial status primarily through call reports, and other information as determined to be necessary. Some other groups upon which FCA has no direct authority occasionally require System institutions to provide information. To the extent possible and feasible, and when such information is made available to FCA, the Agency utilizes the information available through these other sources to reduce reporting requirements imposed on System institutions.

FCA REPORTING REQUIREMENTS

Senator Burdick. How many reports does FCA require associations to submit on a regular basis, and how many are required of district banks? For the record, please provide the committee with a list of the reports required of banks and of associations and the frequency with which they must be submitted.

Mr. Naylor. As with other Federal financial regulators, FCA requires each FCS bank and association to file reports of financial condition and performance every 3 months. The content of these reports presently varies between the different types of institutions. The schedules that make up each report of financial condition and performance are listed on certification sheets that the banks and associations use to certify the correctness of each report. Attached are the sheets for each type of bank and association that FCA regulates. The information follows.

CERTIFICATION SHEET

To: Arnold Miller, Chief
System Data Analysis Division
Office of Analysis and Supervision
Farm Credit Administration
1501 Farm Credit Drive
McLean, VA 22102-5090

The report of financial condition and performance for the ______________ (name of BC as ______________ it appears on its charter) Bank for Cooperatives of ______________ (city), ______________ (state), for the period ended March 31, 1987, is attached.

The report of financial condition and performance consists of the following schedules and specific reports.

Schedule A - Statement of Condition
Schedule B - Statement of Earnings (income)
Schedule C - Statement of Changes in Net Worth
Schedule D - Net Worth and Cash Distribution - BCs
Schedule 6 - Operating Expenses
Schedule 7 and 7A-C - Marketable Securities
Schedule 8 - Analysis of Allowance for Losses
Schedule 9 - Accounts and Notes Receivable
Schedule 10 - Accounts and Notes Payable
Schedule 11 - Participations Purchased
Schedule 12 - Participations Sold
Schedule 17 - Loans Outstanding
Schedule 21 and 21A-C and G-J - Summary of Bonds and Notes
Schedule 24 - Supplemental Interim Information
Schedule 25 - International Lending Activity
Schedule 26 - International Participations Sold or Purchased
Schedule 27 - Analysis of Allowance for Losses on International Loans
Schedule 28 - Miscellaneous Assets and Liabilities
Schedule RG1- Reconcilement of Capital/Deferred Expenses

Collateral Position Report

Loan Performance Schedules: LP100; LP100a; LP155; LP155a; LP185; LP190; LP215; BF100; BF155; BF215; RC999; AB999; and FI999.

Uniform Loan Activity Report and Reconciliation Schedules: LR01; LR07; LR12; LR13; LR14; LR15; LR16; and LR17.

I, ______________________________ (print full name and title of certifying officer), am authorized to certify the correctness of these reports by action of the board of directors of the above named bank for cooperatives or by virtue of being the bank's president or chief executive officer. I hereby certify that this report of condition and performance has been prepared in accordance with all applicable regulations and instructions and is a true and accurate representation of the bank's financial condition and performance for the reporting period ended March 31, 1987.

______________________________ (signature of certifying officer)

______________ (date signed)

CERTIFICATION SHEET

To: Arnold Miller, Chief
System Data Analysis Division
Office of Analysis and Supervision
Farm Credit Administration
1501 Farm Credit Drive
McLean, VA 22101-5090

The report of financial condition and performance for the ______________
(name of FLB as it appears on its charter) ______________ Federal Land Bank of ______________,
(city)
______________, for the period ended March 31, 1987, is attached.
(state)

The report of financial condition and performance consists of the following schedules and specific reports.

Schedule A - Statement of Condition
Schedule B - Statement of Earnings
Schedule C - Statement of Changes in Net Worth
Schedule 1 - Analysis of Allowance for Losses - Loans
Schedule 2 - Analysis of Allowance for Losses - Acquired Property
Schedule 3 - Operating Expenses
Schedule 4 and 4A-C - Marketable Securities
Schedule 5 - Accounts and Notes Receivable
Schedule 6 - Accounts and Notes Payable
Schedule 42 and 42A-K - Summary of Bonds and Notes Outstanding
Schedule 44 - Supplemental Interim Information
Schedule RG1- Reconcilement of Capital/Deferred Expenses

Collateral Position Report

Loan Performance Schedules: LP100; LP100a; LP155; LP155a; LP185; LP190; LP215; BF100; BF155; BF215; RC999; AB999; and FI999.

Uniform Loan Activity Report and Reconciliation Schedules: LR01; LR02; LR03; LR04; LR05; LR06; and LR07.

In accordance with the instructions, the report also includes schedules allocating certain FLB loan performance and loan activity information to each FLBA, branch office, service center, or region. The following schedules are included in the report for each FLBA and for each branch office, service center, or region if required by the instructions: LP100; LP155; LP215; BF100; BF155; BF215; and LR01.

I, ____, am
(print full name and title of certifying officer)
authorized to certify the correctness of these reports by action of the board of directors of the above named Federal land bank or by virtue of being the bank's president or chief executive officer. I hereby certify that this report of condition and performance has been prepared in accordance with all applicable regulations and instructions and is a true and accurate representation of the bank's financial condition and performance for the reporting period ended March 31, 1987.

______________________________ ______________________
(signature of certifying officer) (date signed)

CERTIFICATION SHEET

To: Arnold Miller, Chief
System Data Analysis Division
Office of Analysis and Supervision
Farm Credit Administration
1501 Farm Credit Drive
McLean, VA 22102-5090

The report of financial condition and performance for the ______________ (name of FICB as it appears on its charter) ______________________ Federal Intermediate Credit Bank of ______________________ (city), ______________ (state), for the period ended March 31, 1987, is attached.

The report of financial condition and performance consists of the following schedules and specific reports.

Schedule A - Statement of Condition
Schedule B - Statement of Earnings (income)
Schedule C - Statement of Changes in Net Worth
Schedule 3 - Operating Expenses
Schedule 7 and 7A-C - Marketable Securities
Schedule 8 - Analysis of Allowance for Losses - Loans
Schedule 9 - Analysis of Allowance for Losses - Acquired Property
Schedule 10 - Accounts and Notes Receivable
Schedule 11 - Accounts and Notes Payable
Schedule 12 and 12A-C and G-J Summary of Bonds and Notes Outstanding
Schedule 14 - Supplemental Interim Information
Schedule RG1 - Reconcilement of Capital/Deferred Expenses

Loan Performance Schedules: LP100; LP100a; LP100b; LP100c; LP155; LP155a; LP185; LP185a; LP190; LP215; LP215a; BF100; BF100a; BF155; BF215; BF215a; RC999; AB999; and FI999.

Uniform Loan Activity Report and Reconciliation Schedules: LR01; LR07; LR09; LR10; and LR11.

Collateral Position Report.

OFI Report.

I, ____, am
(print full name and title of certifying officer)
authorized to certify the correctness of these reports by action of the board of directors of the above named Federal intermediate credit bank or by virtue of being the bank's president or chief executive officer. I hereby certify that this report of condition and performance has been prepared in accordance with all applicable regulations and instructions and is a true and accurate representation of the bank's financial condition and performance for the reporting period ended March 31, 1987.

______________________________ ______________________
(signature of certifying officer) (date signed)

CERTIFICATION SHEET

To: Arnold Miller, Chief
System Data Analysis Division
Office of Analysis and Supervision
Farm Credit Administration
1501 Farm Credit Drive
McLean, VA 22102-5090

The report of financial condition and performance for the ______________ (name of PCA as it appears on its charter) ______________________________ Production Credit Association of ______________________ (city), ______________ (state), for the period ended March 31, 1987, is attached.

The report consists of the following schedules.

Schedule A - Statement of Condition
Schedule B - Statement of Earnings (income)
Schedule 1 - Reconcilement of Undistributed Earnings
Schedule 2 - Reconcilement of Allowance for Loan Losses
Schedule 3 - Operating Expenses
Schedule 4 - Capital Stock, Participation Certificates and Numbers of Members and Formal Denials
Schedule 5 - Reconcilement of Allowance for Losses - Acquired Property
Schedule 6 - Interest Rates Effective April 1, 1987
Schedule RG1 - Reconcilement of Capital/Deferred Expenses

Schedules CR01 and CR02 - Summary of Most Recent PCA Credit Review.

Loan Performance Schedules: LP100; LP100a; LP155; LP155a; LP185; LP190; LP215; BF100; BF155; BF215; RC999; AB999; and FI999.

Uniform Loan Activity Report and Reconciliation Schedules: LR01; LR02; LR03; LR04; LR05; LR06; and LR08.

If the association's total assets shown on Schedule A equal or exceed $250 million, the report also includes the following schedules for each of the association's regions, branch offices, or service centers, as appropriate: LP100; LP155; LP215; BF100; BF155; BF215; and LR01.

I, ____ (print full name and title of certifying officer), am authorized to certify the correctness of these reports by action of the Board of Directors of the above named production credit association or by virtue of being the association's president or chief executive officer. I hereby certify that this report of condition and performance has been prepared in accordance with all applicable regulations and instructions and is a true and accurate representation of the association's financial condition and performance for the reporting period ended March 31, 1987.

______________________________ (signature of certifying officer)

______________________ (date signed)

CERTIFICATION SHEET

To: Arnold Miller, Chief
System Data Analysis Division
Office of Analysis and Supervision
Farm Credit Administration
1501 Farm Credit Drive
McLean, VA 22102-5090

The report of financial condition and performance for the ______________ (name of FLBA as it appears on its charter) ______________ Federal Land Bank Association of ______________ (city), ______________ (state), for the period ended March 31, 1987, is attached.

The report consists of the following schedules.

Schedule A - Statement of Condition
Schedule B - Statement of Earnings (income)
Schedule 1 - Reconcilement of Earned Surplus
Schedule 2 - Reconcilement of Allowance for Losses
Schedule RG1 - Reconcilement of Capital/Deferred Expenses

Schedules CR01 and CR02 - Summary of Most Recent FLBA Credit Review

I, ______________________________ (print full name and title of certifying officer), am authorized to certify the correctness of these reports by action of the Board of Directors of the above named Federal land bank association or by virtue of being the association's president or chief executive officer. I hereby certify that this report of condition and performance has been prepared in accordance with all applicable regulations and instructions and is a true and accurate representation of the association's financial condition and performance for the reporting period ended March 31, 1987.

____
(Signature of Certifying Officer)

____
(Date Signed)

SECONDARY MARKET PROPOSALS

Senator Burdick. There has been considerable talk recently regarding a secondary market for farm mortgages. What is your view of this proposal and how would it impact the Farm Credit System?

Mr. Naylor. There are several potential long-term advantages to the farm sector in the creation of a secondary market. These advantages would be in the form of additional "players" in the farm mortgage lending and somewhat lower rates on farm mortgages. The secondary market provides these advantages by enabling institutions originating such mortgages to convert them to cash prior to maturity. The result would permit a new set of risk management strategies that would tend to expand the number of institutions offering mortgage loans to the farm sector. The lowering of interest rates on farm mortgages would occur only to a limited extent, because the sector already gets attractively priced funds through the sponsored agency status of the Farm Credit System. It would also impose some costs and force additional standardization in farm mortgage lending and farm accounting practices.

The immediate impact on the Federal land banks would be negative unless carefully constrained, while the longer term impact could be beneficial. The immediate problem would be loss of volume due to potential transfer of healthier mortgage accounts to institutions obtaining funds through the new secondary market vehicle. This problem would exist at least until the FLBs' high-rate outstanding bond portfolio is retired. Further, the changing nature of financial markets may require that FLBs securitize their own loans, rather than continue to carry interest rate risk internally or through variable rate loans to its customers.

For the longer term, the System has been considered as the potential operator of such a market, on behalf of both itself and other potential farm mortgage lenders. Three benefits to the System might accrue: (1) fee income, (2) economizing on the requirements for System capital stock and surplus, and (3) a supplemental or, alternatively, replacement method of funding System loans, providing additional risk management options.

In order for these potentials to be realized, the current nonperforming loan problem must be resolved and equitable mechanisms for developing and using a secondary market mechanism must be developed. It may also be appropriate to consider also whether the securitization technique should be extended to intermediate and short-term agriculturally related loans.

Senator Burdick. If a secondary market were operated through the Farm Credit System, what potential financial gain would come to the System through fee income from operating the secondary market?

Mr. Naylor. It is evident that the financial institutions using the secondary market gain because a fixed asset (mortgage) becomes liquid and easily marketable, adding to their portfolio management tools. The System as the operator of a program would collect fees for this service and for any "credit enhancement" provided via guarantees or other techniques, such as the sale of mortgage-backed securities with sponsored agency status. The fee sources of income would replace or supplement current earnings or losses of the System on making and servicing its own loans. The financial impact would depend on how the legal authority is structured and administered. This could be especially complex if the System were both a primary lender, funding through the sale of either mortgage-backed security (MBS) or consolidated bonds and a purchaser of mortgages from other primary lenders, also funded through the sale of MBS.

Senator Burdick. What is being done to encourage greater cooperation within the System?

Mr. Naylor. Let me assure you that the FCA's role as a regulator is not to obstruct the process of internal System cooperation. The Farm Credit Corporation of America could more appropriately address these efforts for greater cooperation within the System.

QUESTIONS SUBMITTED BY SENATOR CHILES

FCA'S REGULATORY ROLE

Senator Chiles. Until last year, the Farm Credit System could be characterized during its fifty-plus year history as being non-litigious and as having a non-adversarial relationship with its regulator. This has clearly changed over the past year. Please comment on whether the Agency has a plan or a role in trying to restore a more productive environment in view of the System's immense problems and the complexity of issues?

Mr. Naylor. The realignment of the FCA as an arm's-length regulatory agency over the System as a result of the 1985 amendments is evidently seen by some as creating an adversarial relationship. It is clearly different from the FCA's previous role which included the sometimes conflicting role as the System's home office and primary spokesperson.

The plan or role we have as a regulatory agency under these new authorities is to provide the same productive environment as regulatory agencies in protecting the public interest, including that of existing and potential System borrowers, through sound examination and regulation of these institutions. Efforts we have taken in this area include the borrower rights and shareholder disclosure regulations issued in the past year by the FCA. The FCA Board has also adopted policies addressing improved loan documentation by System institutions and, most recently, is holding public hearings on the implementation of Regulatory Accounting Practices (RAP) regulations.

While this arm's-length relationship with the System may confuse some who are more accustomed to past practices, it more appropriately serves the public, including borrowers, investors, and the agricultural community in general.

BORROWER STOCK

Senator Chiles. As chairman of the Budget Committee, I am very interested in knowing whether the Farm Credit System will require a capital infusion in 1987 or 1988.

- If so, how much and when?

- Has the Farm Credit Administration (FCA) consulted with Treasury on this matter?

- What plans does the FCA have for reviewing the need for financial assistance and preparing a certification to Treasury?

- What form will assistance take?
- How much advance warning will the Congress have if a certification for assistance is made? (e.g. will the FCA only certify the need for assistance once borrower stock has been impaired and collapse of the System is imminent or is it your intent that Congress receive a request for funding months before this situation arises?)

Mr. Naylor. As stated in my testimony, the FCA does not know if, when, and exactly how must outside assistance the System might need. Much of this hinges on the System resolving current litigation and turning non-performing assets into returning ones through debt restructuring and management of acquired properties.

The FCA is in contact with the Treasury and the System regarding its condition and various options that might be incorporated in legislation. If the situation does not change, it is my opinion, however, that the System will most likely need legislation this year which may include Federal assistance of some form.

As indicated in the hearings, the 1986 Farm Credit Act Amendments cloud the certification process. With the utilization of Regulatory Accounting Practices (RAP), the System might technically not exhaust its surplus capital until well into 1988 or beyond. Because of ongoing litigation and the changes in the 1986 legislation, Congress may prefer to address legislation before the certification process originally envisioned by the 1985 amendments could occur. I assure you that this agency stands ready to work with Congress in providing technical assistance to your consideration of appropriate legislation.

Senator Chiles. As you know, my State of Florida is in the third farm credit district which was one of the healthiest banks in the system until capital transfers reduced the third bank's assets to a point where borrowers are questioning the competitiveness of the third bank.

- What is the Farm Credit Administration's quantitative threshold for determining whether the capital transfer program has adversely affected the "competitiveness and viability" of member institutions?
- Does the agency have any plans to amend its capital assessment and transfer regulations?

Mr. Naylor. The FCA has identified in Regulation 12 C.F.R. 611.1142 a set of criteria and limitations under which the Capital Corporation may require System institutions to purchase the Capital Corporation's capital stock, so that it can provide direct financial assistance to them. The criteria provide for an equitable sharing of the burden of providing funds to the Corporation. The criteria ensure that contributing institutions remain able to provide credit to eligible borrowers on reasonable and competitive terms and to obtain funds in the financial markets. The criteria further provide that no institution can be assessed to the point of its own borrower stock impairment.

The FCA is currently conducting an intensive review of these Capital Corporation assessment regulations.

Senator Chiles. I have been hearing from a great number of my constituents who are concerned about the possibility of stock impairment and the non-competitive interest rates that have forced many good borrowers to leave the System. How does the Farm Credit Administration propose to prevent stock impairment?

- How do you propose to help make interest rates more competitive?

Mr. Naylor. The possibility or actual occurrence of stock impairment in certain districts is primarily the result of the massive amount of loan losses that have been charged off by System institutions. Generally accepted accounting principles (GAAP) also require that System institutions maintain an allowance that is adequate to absorb potential losses in the loan portfolio. Accordingly, the high level of past losses and potential losses has been more than could be replaced out of current earnings and has depleted the surplus in certain institutions.

Earnings are necessary to minimize or offset such loss allowances and prevent the possibility of stock impairment. But earnings are generated primarily through interest rates. As a result, System institutions have a dilemma in trying to balance the objective of avoiding stock impairment against the objective of avoiding noncompetitive interest rates. One objective is met with higher rates, the other with lower rates.

The FCA recently promulgated regulations implementing the Farm Credit Act Amendments of 1986, which allows the System to use regulatory accounting practices (RAP) for the purposes of funding the allowance for loan losses. Essentially, RAP accounting will allow the System to defer loan losses over a 20-year period. Because losses can be deferred, earnings can be retained and/or reflected in lower interest rates, thus preserving and strengthening surplus and preventing stock impairment.

It is the responsibility of individual System institutions to develop and implement mechanisms that ensure interest rates are offered on a competitive basis. FCA has issued regulatory guidelines taking the position that System institutions must remain competitive in order to be effective and viable lending institutions, through such devices as differential interest rates and alternative lending programs.

Senator Chiles. A Wall Street Journal article dated February 5, 1987 suggested that Federal officials are considering a proposal which would involve Federal control of the $4.4 billion in borrower stock. We have also been hearing a lot about "restructuring" and "decentralization" of the System. Please share your views on these issues, particularly the status of borrower stock.

Mr. Naylor. The Farm Credit System's 37-bank year-end report for 1986 showed borrower stock and participation certificates totaled $4.188 billion. As a borrower-owned cooperative, the System is partially capitalized by common stock, which is by corporate standards, at risk.

However, the Congress has stated in the 1985 Amendments that the need for Federal assistance should be determined prior to stock impairment. This reflects, in part, a growing concern and realization by the borrowers that though it is the intent of Congress, the System and the Regulator to protect borrower stock, it is at risk and always has been.

The issue of restructuring, decentralizing, or centralizing the System would not necessarily affect this stock requirement. I would suggest, however, that in considering legislation affecting the System, to consider whether the practice of including the stock as a part of the loan and retiring it with the loan should be continued, or modified to provide greater financial stability to the institution. These options include the phasing in or an outright purchase of the stock, a self-funded insurance fund to protect against future stock impairment, and different stock retirement provisions than currently exist and a shift in the balance toward more permanent capital.

NATIONAL COMMITTEE ON AGRICULTURAL FINANCE

Senator Chiles. The 1985 Farm Credit Amendments established a National Committee on Agricultural Finance. Do you know the status of this Committee and whether there are plans for it to meet?

Mr. Naylor. It is my understanding that the White House and House and Senate leaders have named most, if not all, members to the National Committee on Agricultural Finance. FCA has agreed to provide a location for the first meeting of this group which I believe will be scheduled this spring.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

INTEREST RATE REDUCTIONS

Senator Bumpers. At its last meeting, the St. Louis Farm Credit Bank Board adopted regulatory accounting procedures (RAP), which will provide $200 million worth of credits in St. Louis for 1987 alone. The Board voted to use 37 percent of these credits to help shore up the $5 stock, but rejected a motion to use another 52 percent of the credits to provide interest rate relief for borrowers, as was the intent of Congress. The defeated motion would have reduced the interest rate charged to borrowers who are current on their payments or who will be current in 91 days to 10 percent on their loans retroactive to 1/1/87, rather than the current 12 1/2 percent. Bank officials agreed that this rate reduction would not exhaust all the credits but the motion was defeated anyway.

Do banks themselves have the authority to grant interest rate relief?

Is the FCA in any way encouraging member institutions not to use RAP credits for interest rate relief but instead to use the credits solely for shoring up stock?

Mr. Naylor. System institutions now set their own interest rates on loans without FCA approval. We have no direct involvement in the board decisions such as the vote you cite by the St. Louis district. In making these decisions, these boards must give proper business consideration to their need to generate earnings, and they are aware that FCA examiners evaluate earnings in assessing the safety and soundness of the institution.

In response to the expressed intent of Congress, the FCA included in the RAP regulations a clear requirement and authority for System institutions to pass benefits derived from use of RAP directly to their borrowers as interest rate relief. The limit on this requirement was that they should not offer interest rate relief beyond that bringing them to competitive market rates. The FCA believes the regulations clearly encourage institutions to provide interest rate relief where it does not affect the institution's financial viability and is considered appropriate under other existing financial conditions.

DECENTRALIZATION

Senator Bumpers. An article in Wednesday's (2/18/87) Wall Street Journal quotes you as conceding that the Farm Credit System is in serious trouble and will undoubtedly need legislation and financial assistance, this year. The article suggests you favor a new approach, such as decentralizing the system. How can you square this suggested approach with the recent major efforts at centralization -- the primary focus of the 1985 Farm Credit Amendments Act -- and efforts of the FCA to have all Farm Credit banks more or less committed to the survival of one another through the sharing of reserves?

Mr. Naylor. My comments on a legislative solution to the System's current problems include one of the possible structural approaches - decentralization from the standpoint that I have noted a strong interest of many in Congress, agricultural and commodity organizations, and System member-borrowers themselves, that they largely want a decentralized credit delivery mechanism that provides strong local involvement. I would not consider the intent of the 1985 amendments to centralize the System management or to pool its capital resources, but to provide that its institutions share their surplus capital before Congress and the Administration would consider outside financial assistance. I would point out that the 1985 legislation occurred at a time when the previous management of FCA was encouraging centralization within the System through the district-wide mergers of local associations. That is not the case with the current FCA Board.

ADMINISTRATIVE EXPENSES

Senator Bumpers. In your testimony, you cite excessive administrative expenses as one of the System's problems. My office has continued to hear a tremendous number of complaints, both from farm banks and borrowers, that FCA requirements are duplicative, not informational and extremely time-consuming. Is the FCA contributing to unnecessary overhead by requiring more burdensome paperwork than necessary?

Mr. Naylor. The FCA and the System have barely completed one examination cycle under which the regulator has assumed its full responsibilities as required by the Farm Credit Amendments Act of 1985, but I already recognize the concerns you raise. I assure you that every attempt will be made by the FCA to minimize the cost of our necessary examination and reporting requirements.

In accordance with law, the FCA now requires necessary information reported by System institutions similar to that required by other regulators of their institutions to monitor performance. This information is collected primarily through our call reports. Unfortunately, many System institutions do not currently have the capacity to generate automated reports, so they must compile the information manually. As more of these institutions move to automated reporting, administrative burdens could be reduced.

System institutions in a few districts continue to complain about required audits of their annual financial statements by independent certified public accountants and confuse the purpose of these with that of FCA examinations. It was originally anticipated that the FCA's resuming of the examination function previously delegated to district banks would result in the System reducing its administrative expenses.

Senator Bumpers. As you noted in your testimony, the Farm Credit Amendments of 1985 made the FCA an arm's length regulator of Farm Credit System institutions. I certainly agree that this role is an important one. However, I am growing more and more concerned by complaints I am receiving that, now that the entire system is in real trouble, the FCA seems most intent on showing its independence, thus inhibiting the implementation of progressive reforms. I believe that an appropriate role for the FCA would be that of cooperative champion of the system rather than an inhibiting force. What steps are you taking to strike the necessary balance between regulation and cooperation?

Mr. Naylor. May I respectfully refer you to my response to a similar question by Senator Chiles and note that the FCA's arm's-length role should not be viewed by the regulated as that of an inhibiting force. One of the major operating changes resulting from the 1985 amendments was the clarification that the FCA would no longer be the central office for the System. This certainly does not mean that we are unwilling to work with the System leaders and management, but that our communications will more appropriately be in the public forum, as is the case with other regulators and their institutions.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

REGULATORY ACCOUNTING PRACTICES

Senator McClure. Do you feel that the Farm Credit System can take steps to help itself out of this crisis? What, specifically, do you suggest the System banks do to accomplish this objective.

Mr. Naylor. In addition to the four points I cited in response to Senator Burdick's question, I would also suggest some resolution of its litigation.

Senator McClure. When do you plan to change these regulations to meet the intent of Congress?

Mr. Naylor. We believe that these regulations did indeed follow the intent expressed by the Congress at the time they were issued. The regulations were written in a manner that would allow the weaker institutions to use the remedial provisions of the 1986 Amendments while attempting to preserve the financial integrity of the System as a whole. Since their original issuance, the regulations have, in fact, been amended to more clearly reflect the intent of the Congress. In addition, public hearings were held for those wishing to comment on the regulations. All comments will be reviewed, and, if warranted, the FCA will further amend the regulations.

SYSTEM COOPERATION

Senator McClure. Has your plan to force the system banks into reaching an agreement on collateralization of bad debt in system banks and to reaffirm their loan loss sharing agreements met with any success? Do you see this happening in light of the recent court ruling on the Springfield and Texas suit which states that system banks do not have to share assets and enjoin the Capital Corporation from making such assessments? If you win the appeal will the System stand a better chance of avoiding collapse? Why?

Mr. Naylor. The FCA does not have a plan to force System banks to reach any agreement on collateralization of debt. In issuing its regulations implementing regulatory accounting practices (RAP), the FCA Board stated that it will not allow System banks to reverse third quarter 1986 contributions under their capital preservation agreements unless they are able to agree on a method to share loan collateral. The limitation was imposed because the law requires that bank securities be collateralized. The assistance contributions are being counted for necessary collateral purposes by the receiving banks in marketing their securities. A reversal of the contributions would leave receiving banks collateral short and prevent them from going to securities markets, absent a loan collateral sharing agreement. Banks prevented from going to the market would be seriously damaged to the extent they would become unable to repay maturing bonds the other banks in the System would be liable. However, the FCA Board indicated that it may be willing to reconsider the limitations on assistance reversals under the RAP regulations if System banks can agree on loan collateral and sharing and reaffirm their already established loss sharing agreements.

The FCA believes that the issue of collateralization of debt is not related to the Springfield or Texas lawsuits challenging FCA's Capital Corporation assessment regulations.

Should the FCA and the Capital Corporation win appeals of those lawsuits, the Capital Corporation will then be in a position to structure purchases of non-performing loans and acquired properties from weak banks and associations, thus enabling those institutions to operate without the financial burden of carrying those assets.

FCA'S REGULATORY ROLE

Senator McClure. You made the statement in earlier conversations with staff that the system is in serious financial trouble. If you really believe that, why have you not taken steps to find a workable solution to its problem? Will you take a leadership role in finding a solution? Why not?

Mr. Naylor. The Farm Credit Amendments Act of 1985 clarified the FCA's role as that of an arm's-length regulator, removing it from the previous and often conflicting role of being the Washington spokesperson for the System. As such, we are no longer the "leader" for the Farm Credit System directors and their hired management.

However, the FCA is still contributing to the public policy process, as do the other regulatory agencies, in providing technical expertise and assistance to the Executive Branch and Congress. We view this as our proper leadership role.

CERTIFICATION

Senator McClure. Do you agree that the system has depleted its own resources to the point of needing federal financial assistance? If not, when do you see the system reaching this point? What is your plan of action at that point?

Mr. Naylor. The $1.453 billion in remaining System surplus and $3.635 billion in loan loss reserves suggests that it has not depleted its own resources to the point of needing Federal financial assistance.

We cannot now predict when the System will reach the point of needing such assistance with an acceptable degree of certainty. It is our sincere hope that the directors and management of troubled System institutions can rise to the task, get control of the situation, and use the System's own resources to stabilize and reverse the flow of red ink. Such actions would help avoid the need for an infusion of taxpayer dollars in any form and help repair damaged confidence in System institutions.

The FCA monitors the financial condition and performance of each System bank and association in a manner similar to other Federal bank regulators. This information speaks directly to the capital stock, surplus, and results of operations of such institution. We will use this information and the results of financial projections now being made to determine when and if the System has depleted its financial strength to the point of needing Federal assistance in order to make credit available to eligible borrowers on reasonable terms and conditions as prescribed by law.

LOAN RESTRUCTURING

Senator McClure. I understand that individual district banks have begun to use their reserves for loan losses to restructure non-accrual loans, does the FCA encourage other banks to use this system and does it work? What specifically do you recommend to help further this plan of action?

Mr. Naylor. The reserve for loan losses is a valuation account that operates to reduce the book value of a loan portfolio to the level that is actually believed collectible. It does not represent a reservoir of financial resources available for discretionary use or otherwise. The fact that a given nonaccrual loan is restructured results in a chargeoff against such a valuation account, rather than to current earnings. In effect, the charges are made at the time a probable loss is identified, rather than at the time a restructuring is arranged with the borrower. But the reserve must also cover losses on accounts that cannot be restructured, and it must be replenished out of current earnings if additional losses are anticipated.

The FCA encourages restructuring of nonaccrual loans. Properly executed restructurings involve recognition of the portion of a loan that is collectible and action to return the loan to accrual status. If the financial accounts of a lender have been maintained properly, restructurings should not affect a lender adversely. Returning restructured loans to accrual status should improve the lender's financial performance.

SUBCOMMITTEE RECESS

Senator BURDICK. Thank you again for your testimony.

Mr. NAYLOR. Thank you, Mr. Chairman.

Senator BURDICK. This concludes our first hearing in a series of many which will cover the fiscal year 1988 budget for the U.S. Department of Agriculture and related agencies. Our next hearing is scheduled for Monday, February 23, in this same room, at 2 o'clock. At that time, we will hear from the Honorable Richard E. Lyng, Secretary of the Department of Agriculture.

The hearing is now recessed.

[Whereupon, at 3:55 p.m., Thursday, February 19, the subcommittee was recessed, to reconvene at 2 p.m., Monday, February 23, 1987.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

MONDAY, FEBRUARY 23, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2:02 p.m., in room SD–124, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Sasser, Kasten, and Grassley.

DEPARTMENT OF AGRICULTURE

OFFICE OF THE SECRETARY

STATEMENT OF HON. RICHARD E. LYNG, SECRETARY OF AGRICULTURE

ACCOMPANIED BY:

HON. PETER C. MYERS, DEPUTY SECRETARY OF AGRICULTURE

STEVE DEWHURST, DIRECTOR, OFFICE OF BUDGET AND PROGRAM ANALYSIS

OPENING REMARKS

Senator BURDICK. The subcommittee will please come to order.

Good afternoon. Today I am pleased to welcome to the hearing Secretary Richard E. Lyng to discuss the President's proposed budget for fiscal year 1988. Accompanying the Secretary are Peter C. Myers, Deputy Secretary of Agriculture, and Steve Dewhurst, the Budget Officer for the Department. Welcome to the committee, gentlemen.

As a major component of our federal budget, agriculture programs directly affect the lives of more than 2 million farmers, as well as each and every one of us who depend upon their continued existence.

In addition, a large portion of this budget affects what I like to call the consumer side of agriculture and is represented by the food, research and inspection programs that we fund. The impact of the agriculture budget proposal must be viewed with care and precision.

This afternoon, I look forward to the opportunity to discuss several of the President's fiscal year 1988 budget proposals with the Secretary. While I share the concern about the cost of the farm program, I believe caution must be exercised in light of hasty suggestions that we revamp current income support programs.

Despite mounting pressure, I cannot support sizable savings from a 10-percent annual reduction in target prices without any assurance that we are going to provide an adequate income for our increasingly dwindling population of family farms.

The President's budget proposes a number of dramatic budget cuts which have been proposed in the past and which Congress has rejected. These proposals include elimination of the traditional conservation programs, reductions in direct farm operating loans, termination of rural development and rural housing grant and loan programs, and a sharp reduction in rural electrification and telephone loans.

In the food programs, you are proposing to scale back the food stamp program, eliminate meals provided to certain children, reduce participation in the WIC program and completely halt the support for the distribution of our surplus cheese, butter, and other foods to the nation's hungry.

These proposals cause me special concern, as do many others in the budget. The subcommittee will review all of them carefully through the hearing process, and as we work on the appropriations legislation.

On a positive note, I want to thank you, Mr. Secretary, for presenting us with budgetary figures that are based on current law. As you know, many of the President's proposals require legislation which is beyond the jurisdiction of the subcommittee.

I am very pleased, Mr. Secretary, that you have joined us today in order to explain the general policies and budget objectives that the Department of Agriculture hopes to achieve in fiscal year 1988.

Mr. Secretary, you may proceed.

STATEMENT OF THE SECRETARY

Secretary LYNG. Thank you, Mr. Chairman. I am pleased to appear before you to discuss the programs of the U.S. Department of Agriculture and our fiscal year 1988 budget proposals.

Again this year, one of the most immediate problems facing the nation is the budget deficit. The President has submitted a budget for fiscal year 1988 which meets the Gramm-Rudman deficit target of $108 billion.

In order to accomplish that, it was necessary to set priorities by deciding which programs need to be maintained, because a federal role is clearly needed, and which programs should be reduced or shifted to other funding sources.

The choices were not easy ones, but they had to be made in order to get the budget under control. The nation, and particularly agriculture, will benefit greatly as a result of reducing the budget deficit.

The Department has examined the budget from this perspective in developing its proposals for fiscal year 1988. While the President's budget reduces overall USDA program outlays for fiscal year 1988 by about $4 billion from the fiscal year 1987 current estimate, the budget maintains a high-priority emphasis on a range of programs, including research, foreign market development, farm support programs, pest and disease programs, conservation, and food assistance.

Our budget meets the high-priority needs of agriculture while, at the same time, being fiscally responsible. As you have noted, Mr. Chairman, I am happy to be able to say that the budget request before you is a current law request. Unlike past years, there are no legislative savings contained in the appropriations language before this committee.

I would like to summarize and comment very briefly on some of the key USDA programs, and how they will be affected by the fiscal year 1988 budget.

PROGRAM IMPACTS OF 1988 BUDGET

Spending for commodity price support programs is projected to exceed $21 billion in fiscal year 1988. This is down from the record level of $25.8 billion which was spent in fiscal year 1986, and the near-record level which is currently estimated for fiscal year 1987.

The fiscal year 1988 reduction occurs because: One, advance payments for the 1987 crops shifted outlays from fiscal year 1988 to fiscal year 1987; two, a larger acreage reduction program is in effect for the 1987 corn crop which will reduce fiscal year 1988 outlays; and three, no advance deficiency payments are provided for the 1988 crops.

The 1985 Food Security Act, which was projected, when it was signed, to cost just over $50 billion for 3 fiscal years, 1986 through 1988, is now estimated to cost about $72 billion. The costs of farm programs have skyrocketed in recent years and are adding greatly to the budget deficit.

Legislation to reform farm programs as well as control their cost will be proposed in the near future. These proposals include reductions in statutorily mandated target prices, the elimination of a requirement to plant a program crop in order to receive a deficiency payment, greater discretion in reducing loan rates, and more stringent rules for setting and administering payment limitations.

The budget reflects savings from these legislative proposals of over $20 billion during the next 5 fiscal years. Legislation will also be proposed to lower the price support level on sugar and provide for direct transition payments to producers to be phased out over the next 5 years.

FARM PROGRAMS

The budget also requests urgent action to provide the Commodity Credit Corporation with a restoration of borrowing authority of $6.6 billion so that CCC can continue to carry out its program responsibilities for the remainder of fiscal year 1987.

For the longer term, an increase in CCC's permanent borrowing limit from the present $25 billion to $40 billion is being requested so that adequate funding for the price and income support programs will be available during the next several years.

This is consistent both with our own views and with the conference report on our 1987 appropriations. We have appreciated the help we have received from this committee in recent years in trying to deal with the funding problems we have had for the Commodity Credit Corporation.

The expansion of U.S. agricultural exports continues among the highest priorities of the administration, and our budget proposals for fiscal year 1988 in the international area reflect our commitment to that goal. We are proposing that $3 billion of short-term and $500 million of intermediate-term export credit guarantees be made available during fiscal year 1988.

Moreover, we will be carrying out other export promotion activities during fiscal year 1988, such as the Export Enhancement Program and the Targeted Export Assistance Program. We will also be funding the Foreign Agricultural Service and its market development cooperator program at the levels of recent years.

For Public Law 480 food assistance, we are proposing a program level of nearly $1.4 billion for fiscal year 1988, which should provide for the shipment of about 7.8 million metric tons of commodities. While in dollar terms this level of programming is somewhat reduced from the level available this year, the volume of Public Law 480 food assistance will continue well above the levels of the late 1970s and early 1980s. During fiscal year 1988, additional food assistance is expected to be provided through section 416 authority, providing commodities from the CCC stocks for donation overseas.

FARM CREDIT

Farm operating credit will continue to be highly important to farmers during the planting season and funding for operating credit will be maintained with more emphasis on guaranteed loans. In addition, nearly $500 million in interest subsidies authorized by the 1985 act is still available for use over the next 2 years.

These funds can be used to match reductions by private lenders up to a total of 4 percentage points of the interest on farm loans. The Department will also continue to serve its borrowers with such servicing actions as subordinations, rescheduling and deferrals.

BUDGET INCREASES

Our budget proposals reflect the high priority placed on the research and extension programs of the Department. Basic research programs in the agricultural sciences would be strengthened by providing a modest level of real growth for research at our USDA facilities, primarily in the area of plant germplasm, and by providing increases for basic formula support for the land-grant universities.

Increased funding is also proposed for the highly successful competitive grants program. For the extension service, the budget includes increases for basic formula support to the traditional 1862 and 1890 institutions. Consistent with past policy, no funds are proposed for earmarked grants for research and extension.

Soil conservation is of long-term importance to the nation and funding of the Conservation Reserve Program as well as conservation technical assistance at adequate levels is especially important in order to achieve soil savings on the nation's most erosion prone land. By the end of fiscal year 1988 there will be at least 25 million acres placed under Conservation Reserve Program contracts. Costs for this program alone are estimated at over $2 billion in 1989.

The current law request for domestic food assistance programs is $19.3 billion. Legislation is proposed that would better target funds to the needy by maintaining free and reduced-price meals for low-income children in child nutrition programs, but discontinuing subsidies for meals served to upper-income children. In food stamps, federal payments to states for administrative expenses would be reduced when states issue too many benefits in error.

BUDGET REDUCTIONS

In order to provide adequate funding for the priority programs I have mentioned, and still lower USDA outlays for fiscal year 1988, other programs must be reduced or terminated. These include Farmers Home Administration housing and rural development programs, the Agricultural Conservation Program, as well as watershed programs. There are also proposals for new and increased user fees in many areas.

Legislation is being proposed that would fund Food Safety and Inspection Service, Agricultural Marketing Services, Federal Grain Inspection Service, Agricultural Cooperative Service completely through user fees. Also, $85.9 million of Animal and Plant Health Inspection Service programs would be funded through new user fees.

The budget also proposes the elimination of subsidies in programs as diverse as crop insurance and for school lunches served to nonneedy children. And, under a new initiative, lending by the Rural Electrification Administration will be shifted away from direct government loans to a continuing program of REA guarantees of private sector loans.

In addition to these reductions, the budget will also propose that outlays for fiscal year 1987 and fiscal year 1988 be reduced through asset sales. As required by the Omnibus Budget Reconciliation Act of 1986, asset sales are expected to reduce net outlays for the Rural Housing Insurance Fund by $1.7 billion and $1 billion for the Rural Development Insurance Fund during fiscal year 1987.

In fiscal year 1988, we are proposing asset sales which will yield $0.8 billion each from the housing and community loan funds. In addition, loan assets sales by the Rural Electrification and Telephone Revolving Fund and the Rural Telephone Bank will yield $1.1 billion in fiscal year 1988.

I believe these points cover the main areas of the budget. USDA, in concert with many other federal agencies, will have to reduce outlays during fiscal year 1988 if the budget deficit target is to be achieved. However, in reducing these outlays we need to ensure that essential programs and services are carried out at adequate levels. I believe the budget proposals I have just outlined will accomplish those goals.

Mr. Chairman, I would be glad to respond to any questions that you may have. I am looking forward to working closely with you and members of the committee so that we can achieve our budget objectives for fiscal year 1988.

PREPARED STATEMENT

Senator Burdick. Thank you, Mr. Secretary. We have your complete statement and it will be made part of the record.

[The statement follows:]

STATEMENT OF RICHARD E. LYNG

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, I AM PLEASED TO APPEAR BEFORE YOU TO DISCUSS THE PROGRAMS OF THE U.S. DEPARTMENT OF AGRICULTURE AND OUR FY 1988 BUDGET PROPOSALS.

AGAIN THIS YEAR, ONE OF THE MOST IMMEDIATE PROBLEMS FACING THE NATION IS THE BUDGET DEFICIT. THE PRESIDENT HAS SUBMITTED A BUDGET FOR FY 1988 WHICH MEETS THE GRAMM-RUDMAN DEFICIT TARGET OF $108 BILLION. IN ORDER TO ACCOMPLISH THAT, IT WAS NECESSARY TO SET PRIORITIES BY DECIDING WHICH PROGRAMS NEED TO BE MAINTAINED, BECAUSE A FEDERAL ROLE IS CLEARLY NEEDED, AND WHICH PROGRAMS SHOULD BE REDUCED OR SHIFTED TO OTHER FUNDING SOURCES. THE CHOICES WERE NOT EASY ONES, BUT THEY HAD TO BE MADE IN ORDER TO GET THE BUDGET UNDER CONTROL. THE NATION, AND PARTICULARLY AGRICULTURE, WILL BENEFIT GREATLY AS A RESULT OF REDUCING THE BUDGET DEFICIT.

THE DEPARTMENT HAS EXAMINED THE BUDGET FROM THIS PERSPECTIVE IN DEVELOPING ITS PROPOSALS FOR FY 1988. WHILE THE PRESIDENT'S BUDGET REDUCES OVERALL USDA PROGRAM OUTLAYS FOR FY 1988 BY ABOUT $4 BILLION FROM THE FY 1987 CURRENT ESTIMATE, THE BUDGET MAINTAINS A HIGH PRIORITY EMPHASIS ON A RANGE OF PROGRAMS INCLUDING RESEARCH, FOREIGN MARKET DEVELOPMENT, FARM SUPPORT PROGRAMS, PEST AND DISEASE PROGRAMS, CONSERVATION AND FOOD ASSISTANCE. OUR BUDGET MEETS THE HIGH PRIORITY NEEDS OF AGRICULTURE WHILE AT THE SAME TIME BEING FISCALLY RESPONSIBLE.

I AM HAPPY TO BE ABLE TO SAY THAT THE BUDGET REQUEST BEFORE YOU IS A CURRENT LAW REQUEST. UNLIKE IN PAST YEARS, THERE ARE NO LEGISLATIVE SAVINGS CONTAINED IN THE APPROPRIATION LANGUAGE BEFORE THIS COMMITTEE.

I WOULD LIKE TO SUMMARIZE AND COMMENT BRIEFLY ON SOME KEY USDA PROGRAMS AND HOW THEY WILL BE AFFECTED BY THE FY 1988 BUDGET.

- SPENDING FOR COMMODITY PRICE SUPPORT PROGRAMS IS PROJECTED TO EXCEED $21 BILLION IN FY 1988. THIS IS DOWN FROM THE RECORD LEVEL OF $25.8 BILLION WHICH WAS SPENT IN FY 1986, AND THE NEAR-RECORD LEVEL WHICH IS CURRENTLY ESTIMATED FOR FY 1987. THE FY 1988 REDUCTION OCCURS BECAUSE: (1) ADVANCE payments for the 1987 crops shifted outlays forward from FY 1988 to FY 1987, (2) a larger acreage reduction program is in effect for the 1987 corn crop which will reduce FY 1988 outlays, and (3) no advance deficiency payments are provided for the 1988 crops. The 1985 Food Security Act, which was projected to cost just over $50 billion for the three fiscal years 1986-1988 when it was signed, is now estimated to cost about $72 billion. The costs of farm programs have skyrocketed in recent years and are adding greatly to the budget deficit.

- Legislation to reform farm programs as well as to control their cost will be proposed in the near future. These proposals include reductions in statutorily mandated target prices, the elimination of a requirement to plant a program crop in order to receive a deficiency payment, greater discretion in reducing loan rates, and more stringent rules for setting and administering payment limitations. The budget reflects savings from these legislative proposals of over $20 billion during the next five fiscal years. Legislation will also be proposed to lower the price support level on sugar and provide for direct transition payments to producers to be phased out over the next five years.

- The Budget also requests urgent action to provide the Commodity Credit Corporation (CCC) with a restoration of borrowing authority of $6.6 billion so that CCC can continue to carry out its program responsibilities for the remainder of FY 1987. For the longer term, an increase in CCC's permanent borrowing limit from the present $25 billion to $40 billion is being requested so that adequate funding for the price and income support programs will be available during the next several years. This is consistent both with our own views and with the conference report on our 1987 Appropriations. We have appreciated the help we have received from this Committee in recent years in trying to deal with the funding problems we have had for the CCC.

- The expansion of U.S. agricultural exports continues among the highest

PRIORITIES OF THIS ADMINISTRATION, AND OUR BUDGET PROPOSALS FOR FY 1988 IN THE INTERNATIONAL AREA REFLECT OUR COMMITMENT TO THAT GOAL. WE ARE PROPOSING THAT $3 BILLION OF SHORT-TERM AND $500 MILLION OF INTERMEDIATE-TERM EXPORT CREDIT GUARANTEES BE MADE AVAILABLE DURING FY 1988. MOREOVER, WE WILL BE CARRYING OUT OTHER EXPORT PROMOTION ACTIVITIES DURING FY 1988, SUCH AS THE EXPORT ENHANCEMENT PROGRAM AND THE TARGETED EXPORT ASSISTANCE PROGRAM. WE ALSO WILL BE FUNDING THE FOREIGN AGRICULTURAL SERVICE AND ITS MARKET DEVELOPMENT COOPERATOR PROGRAM AT THE LEVELS OF RECENT YEARS.

- FOR P.L. 480 FOOD ASSISTANCE, WE ARE PROPOSING A PROGRAM LEVEL OF NEARLY $1.4 BILLION FOR FY 1988, WHICH SHOULD PROVIDE FOR THE SHIPMENT OF ABOUT 7.8 MILLION METRIC TONS OF COMMODITIES. WHILE IN DOLLAR TERMS THIS LEVEL OF PROGRAMING IS SOMEWHAT REDUCED FROM THE LEVEL AVAILABLE THIS YEAR, THE VOLUME OF P.L. 480 FOOD ASSISTANCE WILL CONTINUE WELL ABOVE THE LEVELS OF THE LATE 1970S AND EARLY 1980S. DURING FY 1988, ADDITIONAL FOOD ASSISTANCE IS EXPECTED TO BE PROVIDED THROUGH SECTION 416 AUTHORITY, PROVIDING COMMODITIES FROM CCC STOCKS FOR DONATION OVERSEAS.

- FARM OPERATING CREDIT WILL CONTINUE TO BE HIGHLY IMPORTANT TO FARMERS DURING THE PLANTING SEASON AND FUNDING FOR OPERATING CREDIT WILL BE MAINTAINED WITH MORE EMPHASIS ON GUARANTEED LOANS. IN ADDITION, NEARLY $500 MILLION IN INTEREST SUBSIDIES AUTHORIZED BY THE 1985 ACT IS STILL AVAILABLE FOR USE OVER THE NEXT TWO YEARS. THESE FUNDS CAN BE USED TO MATCH REDUCTIONS BY PRIVATE LENDERS UP TO A TOTAL OF FOUR PERCENTAGE POINTS OF THE INTEREST ON FARM LOANS. THE DEPARTMENT WILL ALSO CONTINUE TO SERVE ITS BORROWERS WITH SUCH SERVICING ACTIONS AS SUBORDINATIONS, RESCHEDULING AND DEFERRALS.

OUR BUDGET PROPOSALS REFLECT THE HIGH PRIORITY PLACED ON THE RESEARCH AND EXTENSION PROGRAMS OF THE DEPARTMENT. BASIC RESEARCH PROGRAMS IN THE AGRICULTURAL SCIENCES WOULD BE STRENGTHENED BY PROVIDING A MODEST LEVEL OF REAL GROWTH FOR RESEARCH AT OUR USDA FACILITIES, PRIMARILY IN THE AREA OF PLANT GERMPLASM, AND BY PROVIDING INCREASES FOR BASIC FORMULA SUPPORT FOR THE LAND-GRANT UNIVERSITIES. INCREASED FUNDING IS ALSO PROPOSED FOR THE

HIGHLY SUCCESSFUL COMPETITIVE GRANTS PROGRAM. FOR THE EXTENSION SERVICE, THE BUDGET INCLUDES INCREASES FOR BASIC FORMULA SUPPORT TO THE TRADITIONAL 1862 AND 1890 INSTITUTIONS. CONSISTENT WITH PAST POLICY, NO FUNDS ARE PROPOSED FOR EARMARKED GRANTS FOR RESEARCH AND EXTENSION.

- SOIL CONSERVATION IS OF LONG-TERM IMPORTANCE TO THE NATION AND FUNDING OF THE CONSERVATION RESERVE PROGRAM AS WELL AS CONSERVATION TECHNICAL ASSISTANCE AT ADEQUATE LEVELS IS ESPECIALLY IMPORTANT IN ORDER TO ACHIEVE SOIL SAVINGS ON THE NATION'S MOST EROSION PRONE LAND. BY THE END OF FY 1988 THERE WILL BE AT LEAST 25 MILLION ACRES PLACED UNDER CONSERVATION RESERVE PROGRAM CONTRACTS. COSTS FOR THIS PROGRAM ALONE ARE ESTIMATED AT OVER $2 BILLION IN 1989.

- THE CURRENT LAW REQUEST FOR DOMESTIC FOOD ASSISTANCE PROGRAMS IS $19.3 BILLION. LEGISLATION IS PROPOSED THAT WOULD BETTER TARGET FUNDS TO THE NEEDY BY MAINTAINING FREE AND REDUCED PRICE MEALS FOR LOW-INCOME CHILDREN IN CHILD NUTRITION PROGRAMS, BUT DISCONTINUING SUBSIDIES FOR MEALS SERVED TO UPPER INCOME CHILDREN. IN FOOD STAMPS, FEDERAL PAYMENTS TO STATES FOR ADMINISTRATIVE EXPENSES WOULD BE REDUCED WHEN STATES ISSUE TOO MANY BENEFITS IN ERROR.

IN ORDER TO PROVIDE ADEQUATE FUNDING FOR THE PRIORITY PROGRAMS I HAVE MENTIONED AND STILL LOWER USDA OUTLAYS FOR FY 1988, OTHER PROGRAMS MUST BE REDUCED OR TERMINATED. THESE INCLUDE FARMERS HOME ADMINISTRATION HOUSING AND RURAL DEVELOPMENT PROGRAMS, THE AGRICULTURAL CONSERVATION PROGRAM AS WELL AS WATERSHED PROGRAMS. THERE ARE ALSO PROPOSALS FOR NEW OR INCREASED USER FEES IN MANY AREAS. LEGISLATION IS BEING PROPOSED THAT WOULD FUND FOOD SAFETY AND INSPECTION SERVICE, AGRICULTURAL MARKETING SERVICE, FEDERAL GRAIN INSPECTION SERVICE, AND AGRICULTURAL COOPERATIVE SERVICE COMPLETELY THROUGH USER FEES. ALSO, $85.9 MILLION OF ANIMAL AND PLANT HEALTH INSPECTION SERVICE PROGRAMS WOULD BE FUNDED THROUGH NEW USER FEES. THE BUDGET ALSO PROPOSES THE ELIMINATION OF SUBSIDIES IN PROGRAMS AS DIVERSE AS CROP INSURANCE AND FOR SCHOOL LUNCHES SERVED TO NON-NEEDY CHILDREN. AND, UNDER A NEW INITIATIVE, LENDING BY THE RURAL ELECTRIFICATION ADMINISTRATION

(REA) WILL BE SHIFTED AWAY FROM DIRECT GOVERNMENT LOANS TO A CONTINUING PROGRAM OF REA GUARANTEES OF PRIVATE SECTOR LOANS.

- IN ADDITION TO THESE REDUCTIONS, THE BUDGET WILL ALSO PROPOSE THAT OUTLAYS FOR FY 1987 AND FY 1988 BE REDUCED THROUGH ASSET SALES. AS REQUIRED BY THE OMNIBUS BUDGET RECONCILIATION ACT OF 1986, ASSET SALES ARE EXPECTED TO REDUCE NET OUTLAYS FOR THE RURAL HOUSING INSURANCE FUND BY $1.7 BILLION AND $1 BILLION FOR THE RURAL DEVELOPMENT INSURANCE FUND DURING FY 1987. IN FY 1988, WE ARE PROPOSING ASSET SALES WHICH WILL YIELD $0.8 BILLION EACH FROM THE HOUSING AND COMMUNITY LOAN FUNDS. IN ADDITION, LOAN ASSETS SALES BY THE RURAL ELECTRIFICATION AND TELEPHONE REVOLVING FUND AND THE RURAL TELEPHONE BANK WILL YIELD $1.1 BILLION IN FY 1988.

I BELIEVE THESE POINTS COVER THE MAIN AREAS OF THE BUDGET. USDA IN CONCERT WITH MANY OTHER FEDERAL AGENCIES WILL HAVE TO REDUCE OUTLAYS DURING FY 1988 IF THE BUDGET DEFICIT TARGET IS TO BE ACHIEVED. HOWEVER, IN REDUCING THESE OUTLAYS WE NEED TO ENSURE THAT ESSENTIAL PROGRAMS AND SERVICES ARE CARRIED OUT AT ADEQUATE LEVELS. I BELIEVE THE BUDGET PROPOSALS I HAVE JUST OUTLINED WILL ACCOMPLISH THOSE GOALS.

MR. CHAIRMAN, I WOULD BE GLAD TO RESPOND TO ANY QUESTIONS THAT YOU MAY HAVE. I AM LOOKING FORWARD TO WORKING CLOSELY WITH YOU AND MEMBERS OF THE COMMITTEE SO THAT WE CAN ACHIEVE OUR BUDGET OBJECTIVES FOR FY 1988.

PRICE SUPPORT PROGRAMS

Senator BURDICK. Senator Grassley, do you have an opening statement?

Senator GRASSLEY. No, I don't, but I will have some questions.

Senator BURDICK. Senator Kasten, do you have an opening statement?

Senator KASTEN. No, Mr. Chairman.

Senator BURDICK. Mr. Secretary, the budget summary proposed by the administration contains this line and I would like to quote it, and then have your response.

"The administration will propose legislation to modify farm commodity price support programs in order to solve the farm program problems once and for all."

How are you going to do that? Are you going to do this by reducing target prices by 10 percent?

Secretary LYNG. Yes, Mr. Chairman. The major thrust of the legislation we will introduce will call for a reduction of the target prices by 10 percent commencing in the 1989 budget year. This would be for the 1988 crop, because the payments for a crop are made in the following year. A 10-percent reduction over 3 years will have a substantial change in the farm programs as we now know them.

Senator Burdick. My question to you is, how on earth is reducing income to farmers by letting the target price fall by this percentage going to reduce the farm problems once and for all? Do you think that reducing them by 10 percent is going to reduce the problems once and for all?

Secretary Lyng. Once and for all, Mr. Chairman, may be a bit overoptimistic, but it would make a major contribution and still leave substantial money for farm income support.

We are talking about reducing the payments under the target price and deficiency payment system, a system that is now costing $26 billion a year. We are talking about reducing that $26 billion by $10 billion by fiscal year 1992. But even that figure will be three times as much as the average during the 4 years of the Carter administration, so it is not a niggardly program. It would move much farther toward the kind of market-oriented agriculture that we are hoping to achieve through the GATT negotiations.

If we can achieve some successes there, we will find that our farmers will be able to participate in the international arena without as much government price support because we won't have other governments spending as much money in competing subsidies.

Senator Burdick. Mr. Secretary, I am sure that you are aware of the conditions in the heartland of this country. There are real problems, real trouble out there today, and a lot of it is lack of income. If we are going to reduce the price support programs, or reduce the target price, which does reduce the prices, what are we going to do about that 25 or 30 percent who are just on the edge today?

Secretary Lyng. We are not suggesting to do it immediately. As a matter of fact, this, as I pointed out, is a proposal that would be effective in fiscal year 1989. We think that between now and then there will be a material improvement in the situation you have described. We also wonder if we can continue to have expenditures that are near these record levels of nearly $26 billion year after year after year.

PAYMENT LIMITATIONS

Senator Burdick. I agree with you that we have to get those levels down, but I think that we can cut them down without hurting the average farmer. The average farmer needs more income. There are some farmers who are more than average who probably could lose some of the income.

We can't continue at those levels, I agree with you, but I think that we have an answer. I think that we can take care of the family size or the moderate farmer, and put in some other limits. I think that that may solve the situation, and also reduce the cost. What do you think about that?

Secretary LYNG. We will also be submitting legislation and recommendations from the administration which will call for tightening up the payment limitations situation.

We also have a suggestion that should not materially affect the income, but could affect favorably the cost of the program in what we call the 0–92, which would be a program where a farmer would not be required to grow his acreage, his base acreage of program crop, in order to be eligible for deficiency payments. He could plant as little as zero of those acres and get as much as 92 percent of that deficiency payment.

Senator BURDICK. A lot of laudatory statements were made as to how well the cotton program is operating in this country. As a matter of fact, I am referring to an article titled, "USDA Chief Hails Cotton Program." This program, of course, is based upon a marketing loan. If the marketing loan is good for cotton, why isn't it good for wheat?

Secretary LYNG. It works a good deal differently in cotton. The world market for cotton was so much below our statutory support price that we were selling nothing. We were just accumulating, in essence, our cotton in the warehouses within the United States. By instituting a marketing loan, we subsidized the export of cotton down from that support to the world market price, which was very much lower. There was a drop from something over 50 cents to something near 30 cents, and it had a very salutary effect upon the movement of cotton, but it is terribly expensive and costs the taxpayers a lot of money.

Senator BURDICK. Are you saying then that that concept would not work for the small grains like wheat?

Secretary LYNG. No; it wouldn't work the same for wheat or corn, or other feed grains, because of the dominant role of the U.S. market in those commodities. You don't have a world market that is so much lower than our support price. You wouldn't get that kind of movement. It would cost a lot of money, but it probably wouldn't increase exports very much.

CAP ON PAYMENTS

Senator BURDICK. Instead of cutting the target price, as you have testified to here, wouldn't it make more sense to put a cap on some government payments that might be helpful to the moderate and family-size farmer?

Secretary LYNG. It always sounds popular, Mr. Chairman, to suggest that the payments be moved toward the smallest farmer. In fact, it becomes very difficult to do that and still maintain any support for the price of the commodities.

You would almost have to do it, it seems to me, in a direct payment way, and pretty much change our basic farm plan. Some proposals similar to this are apparently coming from Congress and will be debated this year.

Senator BURDICK. I know. I am going to be on one of the bills.

It seems to me that we can do something about this continual loss of farmers. Do you have any argument with the fact that maybe 20 percent of our farmers are in dire straits today?

Secretary LYNG. No. It is very difficult to define precisely, but certainly a fairly sizable number, perhaps as large as 20 percent, are in very difficult positions.

SWAMPBUSTER AND SODBUSTER PROVISIONS

Senator BURDICK. The 1985 farm bill includes swampbuster and sodbuster provisions. You have now been in the process of writing these regulations for a year and a half, and we still do not have the final regulations for these two programs. Yet, this year, during the signup, you are requiring that farmers comply with these provisions.

The signup deadline for the farm program is March 31. The peak period for the Farmers Home Administration accepting applications in North Dakota has traditionally been in February and March.

My question is this. The regulations are not out on swampbuster and sodbuster, and farmers are required to submit their farm plans in order to obtain a loan, and are required to sign up in order to partake in the program. How can they do it without knowing the rules under which they have to operate?

Secretary LYNG. I am going to ask the Deputy Secretary, Peter Myers, to answer that question, if I may, Mr. Chairman, he is more familiar with it than I am.

Senator BURDICK. That is fine.

Mr. MYERS. Mr. Chairman, the preliminary regulations are out, and they have gone out for public comment. We are reviewing the comments and we are almost ready to publish the final rules.

The agricultural community is aware of these preliminary rules and regulations so there should be no problem with them knowing what is in them as there was last year.

Senator BURDICK. In other words, you think that the final product will be much like the preliminary?

Mr. MYERS. The final product will be quite similar to the preliminary. The comments that I have seen—I have not seen what has been incorporated and what has not been incorporated—but I don't think that there will be a great change to the initial rules and regulations.

CONSERVATION PROGRAMS

Senator BURDICK. Mr. Secretary, last year this administration claimed that conservation is one of its top priorities, yet you propose to rescind $300 million in conservation programs for this year. In addition, you propose to cut off $300 million in conservation programs for next year.

I just don't see how you can claim it to be a top priority when you are asking for such dramatic cuts.

Secretary LYNG. We are cutting some programs, notably some of the conservation practice programs. We are moving more heavily into the conservation reserve, the long-term program. We are also maintaining a strong technical assistance program. It is a realignment rather than a reduction.

As I pointed out in the testimony, Mr. Chairman, in fiscal year 1989, we expect to be spending over $2 billion on the Conservation Reserve Program. We think that this is a vastly superior program.

We couldn't see how we could continue all of the programs that we have had in the past and also add this newer, more highly acceptable program, particularly in the face of the difficult budget situation that we face.

Senator BURDICK. Don't you see a gap that will be left by eliminating our conservation program and implementing a conservation reserve program?

Secretary LYNG. No, Mr. Chairman, we don't.

Senator BURDICK. You think that one will flow into the other without any interruption?

Secretary LYNG. We think that the long-term benefits and the technical assistance that will be provided will make a major contribution to improved conservation in the United States.

Senator BURDICK. This will be all for my first round of questions.

I see that Senator Sasser has arrived. Do you have an opening statement, Senator Sasser?

Senator Sasser. Yes, Mr. Chairman.

STATEMENT OF SENATOR SASSER

Mr. Chairman, I want to commend you for moving swiftly to focus on the difficulties afflicting our farm communities. Those of us on this subcommittee have had to wrestle with the vexing problem of what is happening in our rural communities. Unfortunately, the administration's policy has not been much help.

In my home state of Tennessee, for example, troubles in our rural areas have led to something of a two-tier economy. This is occurring, I think, nationally. For example, in my state, urban areas such as Nashville are nationally recognized as leaders in growth and leaders in development.

Most of the urban areas in my state have unemployment rates below the national average of 6.7 percent. But when you get into the rural counties, that is where you start running into real difficulties. The unemployment rates there are running as high as 15 to 20 percent.

It is clear that our rural counties are in need of help to bring development to all of our citizens. Many of the programs operated by the Department of Agriculture are ones that are necessary to provide that assistance. Yet, I find many times that rather than offering a constructive solution to many of the problems that are afflicting rural America, the administration's budget proposals only exacerbate the problems.

BUDGET CUTS

I look at USDA's 1988 budget, and I see $132 million cut from the Soil Conservation Service. I see a request to reduce and even abolish programs in rural housing and water and waste disposal grants and loans of the Farmers Home Administration.

We see reductions in the women, infants, and children feeding program [WIC], one of the more successful government programs, I think, in the past 10 years. This will affect more than 100,000 individuals.

I don't think that we can tolerate to continue to ignore the needs in rural America. We can't turn our backs on the infrastructure needs of rural America. We can't turn our backs on the needs for housing. We can't turn our backs on the need for food assistance.

You have only to look at the front page of the Washington Post today, and read the story there about what is happening in Appalachia, in one county in southwest Virginia that butts up against the eastern part of my state.

Our efforts to reduce the deficit are, I think, of critical importance, but they must not come at the expense of rural counties in the state of Tennessee, or in Iowa, Wisconsin, North Dakota, or in any other state, Mr. Chairman.

The threats that are posed by this two-tier economy that we see developing in this country, I think, are too great to ignore. I want to continue to focus on the question of rural development throughout the 100th Congress.

Mr. Chairman, I know that you and my colleagues on this subcommittee wish to join me in addressing this very important issue of what is happening at the lower tier of this two-tier economy, and that is what I would call the rural, smalltown economies in this country.

Thank you for letting me take the time to make this opening statement.

Senator BURDICK. Senator Grassley.

Senator GRASSLEY. Thank you, Mr. Chairman.

TARGET PRICE REDUCTIONS

Secretary Lyng, before I get to the questions that I came to ask, I want to go back for either clarification or a challenge to you on a couple of comments you made in regard to the chairman's questions.

Number one, isn't the 10-percent reduction in target prices, even though you say that it will come in 2 years for budget purposes, going to affect the 1988 crop?

Secretary LYNG. Yes; I tried to make that clear, but perhaps I didn't. There would be a proposal for a reduction in the target price on those crops produced in 1988, or what would be commonly called the 1988 crop, but most of the fiscal impact of that would take place in the 1989 budget.

Senator GRASSLEY. That is the 10-percent reduction not just once, but it would be a further 10-percent reduction for each of the next 2 years, so it would compound into more than a 30-percent reduction in target prices.

Secretary LYNG. That would be correct. If you did a 10-percent reduction on the remaining balance, it might be a little less than 30 percent for the three. But substantially, it would be a 30-percent reduction in the target price.

Senator GRASSLEY. By the time you get to the third year of the 5-year farm program?

Secretary LYNG. That is correct.

Senator GRASSLEY. Stating the obvious, just like the chairman did, and I am sure other members of this committee will, I want to go on record like I have so many times in front of you, as well as other people, in opposition to that, not from the standpoint that farmers should not probably bear a fair share of reductions in order to balance the budget by the end of Gramm-Rudman, but I see what has happened, through the President's budget here, as efforts to reduce agricultural programs.

I know you have been told by OMB, you produce us some savings, so that we can continue a 3-percent real increase in the defense budget, which is probably like a 7- or 8-percent increase in the defense budget of 1988 over 1987.

Regardless of the reasons that you have to go along with the 10-percent decrease, you said that this reduction might solve the farm problems once and for all. I don't believe it will.

I think that it is a question of whether or not we are going to have the government's resources from the budget come to the upper Midwest, or whether or not they are going to go to California and Texas where 40 percent of the defense budget is spent. I guess, maybe, I feel that the upper Midwest is entitled at this time to its share of the safety net.

The defense budget gets its fair share of the safety net, and the defense industry does in the sense that we have an unwritten public policy around here that none of the defense industries are going busted because they are so vital to the national security. Food production, likewise, is as important to our national security, and that leaves aside the obvious economic needs of our farmers.

So I want to say that I believe that from your estimation, it might solve the farm problem once and for all. I don't believe that, regardless of the question of fairness that I raised. But it surely is going to put a lot of farmers out of business once and for all. I sincerely believe that, and it is for those reasons that I feel we should not go along with that decrease.

MARKETING LOAN PROGRAM

For another challenge to you in the way of your describing, as you did for the chairman, the rationale behind the marketing loan for cotton and not for grains, then, of course, I am interested in it for feed grains. You suggested that the reason was because we were not selling in the world market. The world market was so much lower, we were just not shipping any cotton.

Isn't the purpose of the marketing loan program for cotton the same as it ought to be for feed grains in the sense that it is a philosophical expression that we are saying to the rest of the world, we are not going to price ourselves out of the world market, whether it be cotton, or whether it be corn. To some extent, we did that with corn, because corn exports are down 40 percent. Isn't that how we ought to be looking at the marketing loan, the signal we send? You can only make a fractionally better case for cotton than you can for feed grains.

Secretary LYNG. I think that it is a difference in kind, rather than a difference in degree.

The United States, while a major player in the world cotton trade, is not dominant in the sense of setting the world market price. The world market price was way below our support price, or our U.S. market price.

CORN PRICING

On corn, we are by far the predominant producer and marketer in the world trade of corn and feed grains, and our prices have been as low or lower than anywhere in the world.

Senator GRASSLEY. Today, can you say that we are setting the price for corn in the world market?

Secretary LYNG. Yes; that is the case, Senator Grassley. We are having a bit of trouble competing with feed wheat, but I don't think that very many places are selling corn cheaper than we are.

There may be an occasion where a subsidized sale from one government or another, because it is a big world, and we have surplus corn in a number of countries that have not had surplus corn before, but it is relatively modest in price differences. Our corn sales are not as bad as you have indicated, and they are picking up.

Senator GRASSLEY. How much are our sales down right now compared to 12 months ago? Aren't they down 40 percent?

Secretary LYNG. No; they are not down 40 percent. I can't give you the precise number, but it is a modest decline, because it has been picking up in the last few weeks.

Senator GRASSLEY. I agree with the pick up over the last few weeks.

Secretary LYNG. I think that it might be about 6 percent down from a year ago.

Senator GRASSLEY. Can you tell me how much it is down from over the last 3 years? Is it down over 40 percent over the last 3 years?

Secretary LYNG. No; it isn't that much, Senator.

Senator GRASSLEY. It is down considerably more than 6 percent for the last 3 years, though?

Secretary LYNG. Consider that last year we sold a lot of corn to the Soviets, and we have sold none to the Soviets thus far, with that difference, we have actually sold more elsewhere. If you took out sales to the Soviets, our sales on corn are not down very much even over a period of years.

Senator GRASSLEY. Is your argument a budget item argument for not having the marketing loan program for corn, as opposed to cotton?

Secretary LYNG. It is partially a budget item, and it is also partially a strong belief that the marketing loan would not have the practical effect of increasing our exports. It would cost a lot of money. It would create a lot of market confusion.

It has not been strongly supported by either the producers or the trade, or farm organizations. I have had the authority under the 1985 farm bill to institute a marketing loan on wheat, feed grains, and soybeans, and we have looked at it on a number of occasions. During nearly a year that I have been Secretary, I have tried to be quite straightforward with people in explaining why we were not going ahead with this.

Senator GRASSLEY. I think that what we were trying to do in cotton was to tell the rest of the world that we are going to play in your ball game. Even though we might be playing more in the ball game in feed grains than we were in cotton, I think that it is another way of saying in no way are we going to shut ourselves in any way out of the world market in corn.

Could I go on to a more specific question now, because I feel an honest difference of opinion here that can't be solved by any more discussion.

CONSERVATION RESERVE SIGNUP

I would like to know if there are any plans to give the people who signed up for the 10-year conservation reserve program in August the $2 bonus that the people who signed up in February are getting?

To me, I don't know whether in my state it is approached just as a dollar item for the farmers affected as it is from the standpoint of is it really fair for the government to change the rules in the middle of the game, and give some farmers benefits that others didn't get.

Secretary LYNG. We didn't have a signup for the 1987 crop.

Senator GRASSLEY. He is saying that you did have one. You had one last fall.

Secretary LYNG. Are you referring to the 15-percent paid diversion?

Senator GRASSLEY. No; I am referring to the farmers who are right now, in the last 2 weeks in February, signing up for the 10-year Conservation Reserve Program for this calendar year, and there were people who could sign up last fall.

The ones who signed up last fall, either they were accepted or rejected. Those who are in the program, are in the program for 1987, but those who are signing up in February are getting the bonus for signing up of $2 per bushel as an incentive to sign up. The people who signed up earlier feel that it is very unfair.

Secretary LYNG. People who signed up for the Conservation Reserve Program?

Senator GRASSLEY. Yes.

Secretary LYNG. We change those programs all the time. We can't go back and make them retroactive.

Senator GRASSLEY. We are not talking about going back to people who signed up for the 1986 crop year. We are talking about people who were signing up to first take land out of production in 1987. Part of those people who signed up in calendar year 1986 are not getting the bonus that those who are signing up right now for crop year 1987 are getting.

Secretary LYNG. They signed up for the 1987 crop, to participate in the program?

Senator GRASSLEY. We are talking about the 10-year Conservation Reserve Program.

Secretary LYNG. Now they want to change that to include the bonus? We will not change the conservation reserve bids that were made last August. Everyone will have the same opportunity to participate in the program, but we can't go back and reopen those bids for last summer's Conservation Reserve Program.

Senator GRASSLEY. I think what you are saying is that there is some way that a farmer can get the same opportunity if he signed up last year as the farmers are getting this year, but he is going to take a chance that he may not get in at all the second time.

Secretary LYNG. No.

Senator GRASSLEY. I would defer to Mr. Myers.

SIGNUP INCENTIVE

Mr. MYERS. He is exactly right, Senator. We are not going to allow that farmer who signed up in August the option because he must have figured that it was a good deal, even though he signed up for the 1987 crop year. If we backed up for the corn farmer, we might have to back up for the wheat farmer.

The idea was that we were not getting enough corn acres into the reserve so we had to make it more attractive. Most of those bids, even though they were for 1987, that were submitted last August are probably on lower productivity corn. Those people signed that contract, and we did in good faith also, knowing the bid. The reason we sweetened it was because we were competing with our own deficiency payments.

Senator GRASSLEY. At least factually, you would agree with me that you can have two neighbors on the same road, one signed up in August and his neighbor is signing up right this minute; this guy signing up now, this family signing up right now, is going to get $2 per bushel.

Mr. MYERS. That is exactly right. Then, of course, the two neighbors' yields may be considerably different, as you well know.

Senator GRASSLEY. Each farmer is going to be respectively treated to that extent.

Mr. MYERS. He signed that contract knowing what was in the contract. It is a binding contract. The contract that is signed now would be different, and the additional $2 per bushel would be in there.

Senator GRASSLEY. There isn't a farmer that wouldn't have waited if they thought they were going to get a better deal in February than they got in August.

Mr. MYERS. That is true, but we didn't know that we were not going to get enough corn acres bid.

Senator GRASSLEY. I guess all I can do at this point, because I see that you feel adamant about it, I am asking you publicly, as I did in a letter, to think in terms of the fairness of that.

Let me just ask one more question, Mr. Chairman, and then I will defer and wait for my turn on the second round. Will there be a second round?

Senator BURDICK. Yes.

OATS CERTIFICATION

Senator GRASSLEY. What are we going to be able to do for farmers who didn't certify their oat acreage, and who don't have an old base and can't plant oats. The reason was that when they went in to certify for their corn, they were not ready for certification for oats. In my state, they had a 2- or 3-week period of time. One time you go in and certify for oats, and one time you go in and certify for corn.

I don't understand why we are having these farmers live at the ASCS office, and I think it could be done a little more efficiently. My son said that I ought to come up and see how bad it is. I have been having him do it for me, so I guess I will take his word for it.

We are having farmers who want to plant oats, but who just forgot to certify. We ought to be able to provide some way for those people to go back and certify if the only reason for not certifying was just an oversight because of the inconsequential observance of a rule for a crop that, quite frankly, wasn't considered very important because it didn't involve payment.

Secretary LYNG. I don't fully understand the question, Senator, but I suspect that it has something to do with the enforcement of the limited cross compliance.

Senator GRASSLEY. Yes.

Secretary LYNG. If someone does not have a base or a history for oats, they can't plant that without putting their feed grain or wheat acreage in their base.

Senator GRASSLEY. The instances that I am referring to are where the farmer actually raised the oats, the aerial photographs will show that, but they didn't certify that they raised the oats.

Secretary LYNG. I think that over the years, we have had some way of reconstructing a history, but I would have to talk to the ASCS people. I know in one county in California, we had an example in which the county had not kept the record straight, and there were some modifications made. We are going to enforce the cross compliance thing.

Senator GRASSLEY. If you are talking about where a farmer hasn't raised oats, and he might want to start raising oats, I think I would tend to agree with you. But I am talking about where there was just lack of certification, and it came as a result of having to certify on two different dates. Obviously, the farmer is going to certify his corn base because your payment is based upon it. But there is no payment, or at least very little, based upon the oats.

Secretary LYNG. I am sorry, Senator Grassley, I can't answer that question, I just don't know the answer.

Senator GRASSLEY. I will ask you to look into it. I have sent a letter to your office, and I have made several phone calls, but it would be necessary to make a decision probably within 1 week, or 10 days at the most.

Secretary LYNG. We will get right on it.

Senator GRASSLEY. Thank you very much.

[The information follows:]

USDA LIFTS CROSS-COMPLIANCE REQUIREMENTS FOR 1987-CROP OATS

WASHINGTON, Feb. 27—The U.S. Department of Agriculture is lifting the limited cross-compliance requirement for the 1987 crop of oats, Deputy Secretary of Agriculture Peter C. Myers announced today.

Under limited cross compliance, the plantings of other program crops on the farm may not exceed the crop acreage bases of those crops. Today's announcement permits the planting of oats in excess of the oat acreage base without sacrificing eligibility for other crop program benefits.

Plantings of barley on farms having a barley/oat base and also participating in another crop program cannot exceed the barley acreage base. Producers participating in the 1987 barley program must limit their planted acreage of barley and/or oats to not more than the barley/oat permitted acreage.

Myers said the action is being taken to help alleviate the short supply of oats. The Food Security Act of 1985 gives the Secretary of Agriculture authority to change program requirements to adjust for projected crop shortages. The expected carryover of 1987-crop oats, prior to dropping the cross-compliance requirements, was projected to be the lowest since the early 1900's. Myers said lifting the cross-compliance requirement is expected to increase plantings by 2 to 3 million acres. He emphasized the adjustment is for 1 year only.

Myers also said soybean plantings are expected to decrease as a result of the action.

FOURTH SIGNUP

Senator BURDICK. Senator Kasten.

Senator KASTEN. Mr. Chairman, thank you.

Mr. Secretary, welcome.

I also want to focus just for a moment on the conservation title. A number of us worked carefully with that. I think that we are proud that we were able to enact the strongest soil conservation legislation in our nation's history, and I think that we made a real contribution.

My understanding is that the fourth signup period ends on Friday, and we are getting very favorable reports on farmer participation across the country, with estimates that possibly the signup could take over 10 million acres out of production.

What are you hearing about this signup, and about what is likely to be coming out of production, and the participation? Are we doing as well as I am suggesting?

Secretary LYNG. I have only heard that there seems to be considerable activity at the offices where the people are signing up. I have not heard of any estimates of total acreage. It would be hard to put together any kind of an accurate estimate.

But very soon after the signup deadline takes place, we will get the information which will enable us to determine how many acres to accept. I am hopeful that we will have at least 6 million additional acres participating in the program.

Senator KASTEN. I just hope that we can reach those kinds of numbers. We are talking about a lot of cropland. Taking it out of production is not only a good deal for farmers, but it should also save government money, and start to make a dent in some of the crop surpluses. I think that we have a win, win, win situation if we can get this moving along.

HIGHLY ERODIBLE LAND

We are taking unneeded productive capacity out of production, and we are doing it with the program targeted to the erodible land. I wanted to just ask about that question. Do you agree that we ought to continue to have this program targeted at the highly erodible land, and we ought to leave the eligibility criteria alone for right now?

Secretary LYNG. Yes; I think we should, but I don't think we need to stay with that forever. We need to keep reevaluating what is the most effective way of getting the amount of land that we would eventually like to have out of production. There are targets over the longer period of 40 or 50 million acres. If we could get that much of highly erodible land out of production, it would seem to me that it would be the best thing for us to do.

Senator KASTEN. The question that I have is, that there are some people who are talking about the idea of targeting highly erodible land, and that we ought to do away with the idea of targeting that land and, in effect, convert this Conservation Reserve Program into a big soil bank land retirement program.

I don't agree with that idea, and I am hopeful that we are going to continue to keep targeting the highly erodible land, and not get into a soil bank kind of program, which I think would cost a lot more money, and also would take away from the original point of the program, which was to fight soil erosion.

Secretary LYNG. Yes; I agree with the way you phrase that. There is great desirability for us to put this highly erodible land into conservation uses over a period of time. If we can get 40 million acres of that kind of land, it would be a big mistake to drop some highly erodible land and go for less highly erodible land. The conservation reserve portion of this must be continued as an important ingredient in our motive.

Senator KASTEN. Thank you for that answer, Mr. Secretary.

ASCS AND SCS STAFFING

Last, there are a number of people who feel that we are going to have a tough problem implementing some of the other provisions of the conservation title. The chairman mentioned swampbuster, sodbuster and conservation compliance, et cetera. The question we have is, aren't we stretching the workload out there with the SCS and the ASCS offices? I know in Wisconsin, at least, there is a big concern that we are really trying to do an awful lot with just a few people.

First of all, is this a problem out there, or are we unique in Wisconsin?

Second, are you investigating any ways that you might be able to supplement existing field personnel, maybe even on a temporary basis, to try to cope with this situation?

First of all, could you describe the problem? Second, are there ways that you might be able to try to work this out, even on a temporary basis?

Secretary LYNG. The problem is part of an overall picture of where we have been very, very busy. The 1985 farm bill brought a host of new activities. ASCS offices and soil conservation offices have been very, very busy with the new initiatives.

Then there have been the complications involved in getting these regulations out, finally adopted and in place in a timely manner, which has added confusion, some resistance, and some resentment. Some of these are regulatory activities, or come very close to being regulatory activities and, of course, some people are opposed to them because they take away some of the freedom that they have had.

The combination of all of that has made for a lot of work, but I think that we can cope with it. We can shift people around. I think that our ASCS offices, particularly, have demonstrated a fabulous ability to take on all kinds of new assignments and do them fairly well.

I agree with what Senator Grassley said, some of them are very congested, and the requests from the producers are sometimes not given as fast service as they would like. But by and large, I think, our people have done good work. I think that we can move them around and add temporary help where needed, in order to make this thing work. I am confident that it will.

Senator KASTEN. Mr. Secretary, I am anxious to work with you, as a member of this subcommittee, on this particular set of problems.

Thank you, Mr. Chairman.

Senator BURDICK. Thank you.

TEMPORARY EMERGENCY FOOD ASSISTANCE PROGRAM

Mr. Secretary, one of the deferrals that you sent up to Congress was for $28.6 million for the temporary emergency food assistance program even though Congress has overturned that deferral. What is the situation? Has the money been going out to the states on that one?

Secretary LYNG. Yes; the President signed that legislation, and that deferral is no longer applicable.

Senator BURDICK. Is the money in the process of going out now?

Secretary LYNG. I am sure it is.

Senator BURDICK. Thank you.

PAYMENT LIMITATION

Mr. Secretary, preliminary figures I have seen indicate that payments to farmers who reorganized to avoid the $50,000 payment limitation may be adding at least $500 million to the cost of farm programs. I am told that this figure may be a conservative estimate. What would you recommend to enforce this payment limitation?

Secretary LYNG. This has been a very difficult one, Mr. Chairman. The statement that you have made, it seems to me, is probably an accurate one, except that I suspect the number you used is a conservative number.

We don't really know. We are in the process of drafting what will be either regulations or legislation to make this whole issue clearer and tighten the situation up. We think it is badly needed.

I don't know whether it will be regulatory or legislatively. We are not quite sure whether we have the legislative authority to tighten it up the way it should be. If that be the case, we will be coming to the Congress very soon, within the next few weeks at the latest, with some draft legislation to correct the situation.

Senator BURDICK. Certainly, it was the intention of Congress to have that limitation. I am sure that it was your intention to administer it that way, was it not?

Secretary LYNG. Yes; very definitely.

Senator BURDICK. So we can be in agreement that if it is not fixed, we can fix it?

Secretary LYNG. I hope so. It becomes a very complex issue, Mr. Chairman, as you get into it, what is a person, what is a legal entity. It has been a very difficult thing for our local offices to police.

TARGET PAYMENTS

Senator BURDICK. Mr. Secretary, based upon my experience in my state, the current farm program has not been such a roaring success. Personal income in North Dakota fell 8.8 percent last summer, the biggest drop in the nation. There were at least 125 farm foreclosures last year, and that doesn't take into account all of the surrendered deeds and surrendered titles that took place. There were at least 125 actual foreclosures. A survey of the state's farmers found that 49 percent do not expect to be farming in the next 5 years.

Then how, Mr. Secretary, starting in 1988, as you have testified, can we justify cutting the target price by 10 percent a year for 3 years, or 4 years?

How can we justify that in view of this situation out there?

Secretary LYNG. We can justify it, Mr. Chairman, on the basis that we are at record spending levels for these programs. We are paying very high payments, to the point where one-third of the cash farm income this year in the United States came from direct payments.

When you consider the direct government payments, when you consider that over half of the farmers in the United States were not eligible, were not participating in crops, or involved in these programs, it is just a staggering amount of public funds.

We think that there are some real advantages to an agriculture that does not have this heavy government involvement. I would point out, Mr. Chairman, that for farmers to be able to participate and get payments on these eligible crops, they are now being required on wheat, for example, to take 27.5 percent of their base acreage out of production.

It would be our hope, and this goes on in some crops, as in rice where it is 35 percent of their base acreage, that we could have some reduction in the target price if you could permit farmers to produce more so that you don't have a acreage reduction program. The acreage that is reduced is the lowest cost on a per-unit basis for farmers to produce.

We think that it makes a lot of common sense to move programs from these basic crops, that are heavily supported with direct payments, into a system where the farmer would look more to the marketplace.

Senator BURDICK. I certainly agree with that statement, I would like to see more in the marketplace, but we haven't seen it without a farm program. Second, you say, let the farmer produce more. We have been losing markets all over the world.

We don't have the markets that we used to have in Western Europe. We don't have the markets in Asia. We don't have them in India. We don't have them in China. We don't have the markets that we once had. I don't see how increased production is going to help the family farmer.

CAP ON PAYMENTS

Isn't there merit to putting a cap on these payments so that the small, average, moderate farmer can stay alive?

Secretary LYNG. That is certainly one way to reduce the total costs of these programs. It would have some major changes in the effect of the farm programs on foreign prices.

If you eliminated the larger farmers from the programs, you could accomplish the same thing as reducing the target prices. You could find that many large producers were no longer eligible for the deficiency payments or participation in the programs.

If you did that, you would then find that the programs would be benefiting not the overall market, but a limited number of the smaller farmers. A program like that, as I pointed out earlier, can be designed, and we understand that it will be proposed, and there will be debate over in the Congress.

Senator BURDICK. We will meet again with that one.

Secretary LYNG. Yes; I presume so.

Senator BURDICK. We will have our discussion in the Agriculture Committee on that one. There is strong support for that belief that at least we can save that moderate and family-size farmer by this process.

Secretary LYNG. I think that we are all interested in that.

Senator BURDICK. Would the Senator from Iowa like to have another round?

CROSS COMPLIANCE

Senator GRASSLEY. Yes; thank you, Mr. Chairman.

I have one argument that I want to use as you consider whether or not you are going to change this oat situation we were just talking about, and that is, as a practical matter, you know, if the farmer can't plant oats, he is going to plant something there. He is limited on what corn he can plant, so he is probably going to plant soybeans, which contributes to oversupply there, and also obviously less good comes from soil conservation.

If we could somehow, without violation of cross compliance, because I am not talking about giving some farmer the right to do this who doesn't have the right, and wouldn't have the right to do except for just missing the certification date, let him plant oats because there is going to be a shortage of oats anyway. Number two, it is much more soil conserving. Number three, it is not going to contribute to the oversupply of soybeans.

SCS TECHNICAL ASSISTANCE

When you suggest in your speech this afternoon about the ACP program being eliminated as one of the several programs that are being eliminated, does that include the elimination of the support that we give to the personnel in the Soil Conservation Service?

Secretary LYNG. Not the technical support.

Senator GRASSLEY. Not the technical support.

Secretary LYNG. We are maintaining that.

Senator GRASSLEY. Just the direct payment to farmers.

Secretary LYNG. Yes.

Senator GRASSLEY. Let me ask you, along that line, is that what has been traditional, both under Republican and Democratic Presidents, that only that portion of the direct payment, and not the technical help, being eliminated, or has this administration also, in previous budgets, suggested eliminating the technical help as well?

Secretary LYNG. I think we have thought about reducing it more than we are in this budget.

Mr. DEWHURST. Senator, as you know, under the ACP program, 5 percent of the money is reimbursed to SCS for technical assistance in support of the ACP program, but that does not pay for all the technical assistance it gives to the ACP program.

The President's 1988 budget maintains the appropriated funds for technical assistance, but it does eliminate the reimbursement of the 5 percent as have all proposals in recent years which have eliminated or reduced the ACP, the elimination or reduction also always affects the 5 percent.

TENANT FARMERS

Senator GRASSLEY. In the signup for the 10-year Conservation Reserve Program, in existing law, is there any protection for tenant farmers there, and is it adequate?

In the regular program, we do have protection for tenant farmers in the regular set-aside program, and everything like that, but do we have that for the 10-year Conservation Reserve Program?

Mr. MYERS. The same basic wording is in the conservation reserve as in the regular law for farm programs.

Senator GRASSLEY. If a farmer already had a rental agreement with a tenant, and if right now he decides that he wants to sign up for that 10-year conservation reserve, assuming his bid is accepted, if he had a 50/50 crop share arrangement, would the tenant farmer get his share of that?

Mr. MYERS. It would depend on the length of the contract between the farmer and the tenant. If it were a 10-year contract, obviously, he would be protected.

Senator GRASSLEY. Just for the crop year of 1987?

Mr. MYERS. If it was a year-to-year contract, they would have to work it out for the out years.

Senator GRASSLEY. But he would at least get it for the 1 year?

Mr. MYERS. Basically, we let the farmer and the tenant work that out between them, but there would be protection for the 1 year that the tenant had the lease.

Senator GRASSLEY. The landlord could not undercut the tenant farmer, then?

Mr. MYERS. Not if his contract protected him, his rental contract, not the conservation reserve contract.

EXPORT ENHANCEMENT PROGRAM

Senator GRASSLEY. Are you going to spend for the year you are now in all the money that was appropriated by Congress for the subsidies for export, the Export Enhancement Program?

Secretary LYNG. The amount, as I recall, was $1 billion over a 3-year period, and we will exceed that.

Senator GRASSLEY. You will exceed that?

Secretary LYNG. Yes.

CCC INCREASE

Senator GRASSLEY. What is your rationale for increasing to $40 billion the borrowing authority for the CCC? It seems like a tremendous increase.

Secretary LYNG. We have been forced, as you will recall, Senator Grassley, to come before this subcommittee and the full Appropriations Committee over and over and over again for supplemental appropriations. As I understand it from Mr. Dewhurst, this would make it less necessary for us to do that.

Mr. DEWHURST. Yes, sir; the way the books are kept for the CCC, the current $25 billion in borrowing authority, the line of credit that they have with the Treasury, is tied up when the CCC has inventories of commodities that have book value, when it has outstanding crop loans. All of those transactions count against this borrowing authority, and almost the full $25 billion is in use at any given point in time, and exceeded frequently.

Senator GRASSLEY. Is there any reason that we should read into this request that you expect more than the anticipated amount of grain being taken over by the government?

Secretary LYNG. No; I think that the numbers that we are talking about are about the same, but we just have to keep requesting, as we are in this budget, $6.6 billion in a supplemental, which we will need by the end of April.

With the programs, we are spending $26 billion a year. Money is moving in and out, so the $26 billion is the net. We find ourselves operating a business without enough working capital, I guess that would be one way to phrase it. This would give us a little more room to be able to give better service.

As you know, last year, there were two different occasions when we were unable to continue to make payments to ASCS offices because the supplementals had not gotten through the Congress. This is not to be critical of the Congress, we know that it takes some time to get those things prepared and submitted, and cleared. This is something that has been approved by the Office of Management and Budget, and the administration, and we think that it makes eminent good sense for the U.S. Government to do it.

AGRICULTURAL EXPORTS

Senator GRASSLEY. How much of an increase in agricultural export—and I guess I would like to have you speak to wheat, sorghum, and corn—will there be during calendar year 1987 over 1986?

Secretary LYNG. Our current numbers for exports in total are about $26 billion, which is a little bit above what it was last year. It was $26 billion of exports in fiscal year 1986.

Senator GRASSLEY. But that is about as much of an increase as you would expect in 1987 over 1986.

Secretary LYNG. It is virtually flat.

Senator GRASSLEY. So we don't expect any increase, then, in 1987 over 1986. That would lead me to a question. Is there anything that we can do about that?

For instance, we are losing soybeans because of the subsidies. We are losing market share in soybeans, for instance, because of the subsidies of Latin American countries, which have a great impact. Do we have any sort of plan for counteracting that?

Secretary LYNG. I should point out, if I may go back to these numbers, that I was giving you dollar figures. With the lower prices that we have as a result of the 1985 farm bill, where prices are lower, the tonnage is a better picture. The tonnage is 109 million tons in 1986 as compared to 114 million in 1987, up about 5 million tons estimated for 1987.

One commodity that is down is corn. It is down from 31 million tons to 28 million tons. Wheat is up. Grains, other than corn, are up. Soybeans are just almost identically the same.

SOYBEAN EXPORTS

Senator GRASSLEY. You might take exception to what I said about soybeans, and I assume that in your figure, you are including soybean oil and meal, as well as just plain old soybeans, the raw product.

Secretary LYNG. Soybean oil, we expect to be down very slightly, and also soybean cake and meal.

Senator GRASSLEY. Are there any steps in our domestic programs to assist soybean farmers as a result of that reduction in exports, because it is so dependent upon exports?

Secretary LYNG. Soybeans are a special problem. Soybeans are finding themselves increasingly in a difficult competitive position. For corn, we have the deficiency payments, we have a target price, and loans which are quite a bit lower. We wind up with corn at a price that is much lower than soybeans, a commodity which does not have the benefits of deficiency payments or a lower loan level.

This is having the effect, we fear, that the production of soybeans may have increased substantially elsewhere in the world. It simply may look like a more attractive crop because of our support levels. We are acquiring, and it looks like we will acquire, a large amount of soybeans in our commodity credit loan program. It also could stimulate the production of soybeans within the United States as a choice against sweet beans, as you mentioned earlier.

The soybean program, which over the years has been one of the best programs, is now suffering as an innocent bystander because of the vigor of the corn program.

Senator GRASSLEY. One last question, Mr. Chairman, and I think you may have touched on this.

FARM OPERATING LOANS

It would be the extent to which your Department, through credit for farmers through the Farmers Home Administration, anticipates problems this spring—I am talking about immediately now—for this crop year. If there are problems, how do you anticipate meeting them?

Particularly, we have found it necessary from time to time in previous years, for my state, to urge reprogramming, and we have had good cooperation, I would say, in some reprogramming of money from states that were surplus to states that were deficient, as one example, but don't limit yourself to just reprogramming.

Let me summarize again, is there a problem? If there is going to be a problem, are you going to try to meet it? If you are going to try to meet it, how to meet it?

Secretary LYNG. There may be a problem. There have been problems almost every spring in recent years. At this point, the problem would appear to be less severe than it was a year ago.

I am a little uneasy about suggesting that there is not a problem because problems can arise very quickly, as you know.

Senator GRASSLEY. You protect yourself politically if you kind of admit the real problem.

Secretary LYNG. That is what I am trying to do a little bit here. We know that can become a very difficult problem unless we do some reprogramming and find ways of handling it.

One of the things that seems to me to be a bright spot is the acceptance that we are getting for the FmHA guaranteed loan programs. It is having the effect of decreasing the amount that we are making in outlays.

We think that it is a solid improvement in the kind of farm credit that the farmers need by getting the participation of private banks. This program has worked especially well in the state of Iowa.

Senator GRASSLEY. I think that that is fair. But if there is more of a problem than what you think, you feel a willingness to address it vigorously.

Secretary LYNG. Yes, Senator; I have learned over the years that failure to do that can be very difficult.

Senator GRASSLEY. Also get ready for maybe next year when there will be a problem if you don't have an advance deficiency payment. So crank that into your thinking over the next 12 months.

Secretary LYNG. This could be one of the reasons that we are not having as much difficulty this year, the size of the payments that we have put out, not just the advance deficiency payments, but other things. There has been a lot of federal cash going out into these programs, I think over $3.5 billion in Iowa.

Senator GRASSLEY. I hope that you aren't jealous, we don't have quite the program that wheat has, let me put it that way. I need to tell you that, because I usually say that to Senator Dole. [Laughter.]

Thank you, Mr. Chairman.

SUBMITTED QUESTIONS

Senator BURDICK. I have some additional questions, and I will ask them for the record, and you can respond in a reasonable time.

Secretary LYNG. We will be happy to do so, Mr. Chairman.

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR BURDICK

MARKETING LOAN

Question: I don't buy the argument that the marketing loan is a more costly program to the Government. The Government is getting back the same value of goods be it in cash or in grain under either the marketing loan or the statutory loan. Have you analyzed how much money you would save in storage costs if you implemented a marketing loan for wheat and feed grains?

Answer: If a marketing loan were implemented for wheat and feed grains, storage costs would not likely decrease compared to the current program. Under the 1985 Farm Bill marketing loan authority, minimum repayment levels would still provide a price floor and with the current world grain surplus, competitors could underbid the U.S. price floor. As a result, significant quantities of grain would likely be forfeited to and stored by CCC, increasing storage costs.

The use of generic commodity certificates offers more flexibility to maintain U.S. price competitiveness and an opportunity to sell grain under loan and owned by CCC at competitive market prices. Thus, lower quantities of grain are likely to be taken over and stored by CCC, thereby reducing CCC storage costs.

RESERVE

Question: Mr. Secretary, for the first time since 1977, you are not allowing farmers to enter their grain under loan into the three-year reserve program. Doesn't it make more sense to store this grain on the farm? Won't it just cost the taxpayers more to transport this grain and store it in commercial facilities? With financial conditions as tough as they are, I know farmers in my State could use the storage payments.

Answer: We believe the size of the farmer-owned reserve for wheat and feed grains is adequate. Permitting 1986 crop loans into the reserve program would isolate such grain from the marketplace and hinder our efforts to be competitive in the domestic and export markets. We agree that it makes sense to store grain on the farm to avoid further congestion in the commercial facilities. To help facilitate this situation, we will be offering producers with maturing 1986 crop wheat and feed grain loans a 12-month extension with annual storage payments paid in advance equal to the rate offered under the reserve program. This will permit producers wanting storage payments to earn them. At the same time, it makes this grain more readily available to the marketplace if it should be needed. We believe this approach is a more flexible alternative than placing such grain into the three-year reserve program.

FOREIGN MARKET DEVELOPMENT

Question: In your statement, Secretary Lyng, you assert that the USDA budget maintains a high priority emphasis on a range of programs, including foreign market development.

The 1985 Food Security Act authorized two export promotion initiatives that I would like to discuss with you:

1. The Foreign Market Development Cooperator Program provides an avenue for expanding and maintaining existing markets for U.S. agricultural commodities using nonprofit agricultural trade associations. The President's budget request maintains the Cooperator Program at the same level as enacted in 1987.

Recognizing the decline in the value of the dollar in international markets, and noting your emphasis on export promotion, why does not your budget increase funding for the Cooperator Program?

Answer: Although the Adminstration is committed to developing, maintaining and expanding U.S. agricultural exports and recognizes the success of the Foreign Market Development Program in this endeavor, the current budget deficit precludes an increase for the program at this time. Private industry and agricultural producers have historically shared with the Government the expense of our foreign market development program, absorbing an increasingly larger share over the years. We are hopeful that the agricultural sector's confidence in the successful track record of our joint program will promote an increase in private sector contributions sufficient to offset any reduction in program levels attributed to the declining purchasing power of the dollar overseas. In any case, we feel the current budget level is adequate to maintain a viable presence for U.S. agricultural exports in the world marketplace.

2. The new Targeted Export Assistance Program implemented in 1986 provides certificates to aid in the promotion of U.S. Agricultural products overseas. The demand for "T" certificates from industry representatives has been high -- first for specialty crops and now for feed grains and others. Yet the President's budget would cut the Targeted Export Assistance Program by $30 million.

Can you reconcile this reduction with your emphasis on export promotion and foreign market development?

Answer: The Administration's request for a $30 million reduction in the annual funding level of the Targeted Export Assistance Program is in no way indicative of a retrenchment from its commitment to increased U.S. agricultural exports. Although the number and scope of projects under the TEA program would obviously have to be reduced somewhat or deferred, the remaining authorized budgetary levels are considered adequate to provide the essential promotion assistance for most commodities envisioned by the legislation.

P.L. 480 AND SECTION 416

Question: How well does the relationship between the USDA and the Agency for International Development work with respect to implementing the provisions of the Food Security Act of 1985?

Specifically, I refer to the prompt issuance of regulations for monetization under P.L. 480 -- Title II and Section 416.

Answer: Generally we have an excellent day-to-day working relationship with the Agency for International Development (AID). AID is acting as the agent of the Commodity Credit Corporation for the Section 416 program and, by Executive Order, is responsible for administering the P.L. 480 Title II Program. Since both of these are donation food aid activities, it is important that we work together on them. We do have in place, regulations for both the Title II and the Section 416 programs. We are currently working with AID to update the Section 416 regulations. While we are approving monetization components of both Title II and Section 416, AID is drafting additional guidance on this aspect of these programs. We are working with AID on this guidance, which should be ready shortly.

Question: For what countries have you approved monetization proposals to date?

Answer: There have been numerous such approvals of monetization in both Title II and Section 416. Some of the countries where this is the case are Haiti, Guatemala, Jamaica, Mauritania, Peru, Zimbabwe, Madagascar, Guinea, Rwanda, Mali, Mauritania, Tanzania, and Mexico.

Question: How much of a policy role is the Office of Management and Budget (OMB) taking in the process of implementing changes required by the Food Security Act?

Answer: I am not aware that OMB is taking any special policy role in implementing the changes required by the Food Security Act. With specific regard to the food aid programs, OMB is one of several agencies which make up the Food Aid Subcommittee. In this capacity OMB, along with the other member agencies, does participate in policy decisions.

Question: Section 108 changes to P.L. 480 require that 10 percent of local currencies generated under Title I be used for private enterprise promotion activities. Are you actively promoting sales agreements under this authority?

Answer: Yes, we are encouraging Title I countries to take advantage of this opportunity to help promote their local private sector. We have already entered in Title I agreements containing Section 108 program with Costa Rica, Jamaica, Sri Lanka, and Tunisia. We are actively discussing the program with many other potential participants.

Question: For what countries have you approved private enterprise promotion projects to date?

Answer: If you are referring to actual loans to the local private sector under the Section 108 Program, we have not yet reached that point in the process. Before we reach that stage, the commodities must be purchased and shipped from the United States; the recipient country must receive and sell the commodities; the government must pay the United States; with these sales proceeds; and the U.S. Government must enter into a loan agreement with financial intermediaries who make loans to the local private sector.

MEETING WITH WHEAT-PRODUCING NATIONS

Question: Mr. Secretary, you met last week with representatives of the other major wheat-producing nations. What did you discuss in this meeting?

Answer: We discussed a broad range of topics, focusing particularly on the current over-supply situation and ways to approach it during the upcoming multilaterial trade negotiations.

Question: Have you ever raised in these discussions the possiblity of multilateral talks to divide market share and limit production?

Answer: The concept of market sharing in a direct or indirect form was raised, but by countries other than the United States. In particular, Australia has proposed a freeze on current subsidies which would in effect also freeze market shares around their current level.

Question: What is your view on such negotiations?

Answer: We do not agree with this arrangement because it would inhibit the free market system, reduce the pressure for serious long-term international cooperation and be unfair to those countries, such as the United States, that currently have large surplus stocks. In addition, such a system would prove very unwieldly and difficult to administer in an open and up-front fashion.

TEMPORARY EMERGENCY FOOD ASSISTANCE PROGRAM

Question: Mr. Secretary, one of the deferrals that you sent up to Congress was for $28.6 million for the Temporary Emergency Food Assistance Program. Congress has overturned that deferral and I assume that that money has now gone out to the states. Has it?

Answer: Yes, the funds have been made available to the states now that the TEFAP deferral has been disapproved by the Congress.

Question: In addition to singling out a program that is so important to the poor, hungry and elderly of our country and that makes such good use of our surplus commodities, what really grated me about this deferral, is that your Department -- your Food and Nutrition Service -- told states that funding for this program was cut back prior to Congress receiving and the President signing this deferral. I am told of an instance in one state where the state agency running the program was told on January 20 that the funding would be cut back and they would not receive their full allocation. That was eight days prior to Congress having received the deferral notification which was on January 28. Do you have authority to hold back appropriated funds of this nature without providing the appropriate notification to Congress? Why did it happen in this case?

Answer: The Fiscal Year 1988 Budget was submitted to the Congress in two stages. The first stage was submitted on January 5, 1987, and included proposals to transfer funds from TEFAP, the Rural Electification Administration, and the Forest Service, to fund pay costs and increased retirement contributions. These proposals were consistent with Administration policy. They also conformed to the provision in the Fiscal Year 1987 continuing resolution that the Department absorb 50 percent of the 1987 pay raise.

The second stage in the submission of the Fiscal Year 1988 Budget occurred on January 28 when additional documents, including the TEFAP deferral message, were submitted to the Congress.

Question: Do you expect that it will happen again?

Answer: We do not feel as though it is possible to predict what will happen in the future.

EXPORT ENHANCEMENT PROGRAM FOR VEGETABLE OILS

Question: I understand that the National Sunflower Association, along with the Soybean and Cotton Oil organizations have filed a joint and generic vegetable oil export enhancement application for Algeria. I want you to know how strongly I support their application, and hope that it will be approved in an expeditious manner. I understand that it is on a fast track in your Department and I commend you for that.

Can you tell me what its current status is and when it may be, hopefully, approved?

Answer: The vegetable oil export enhancement proposal is under active consideration. A decision on whether or not to implement a vegetable oil program for Algeria will be made following full consideration by USDA and other interested U.S. Government agencies. At this point, however, it is not possible to predict exactly when interagency consensus will be reached on this proposal.

CONSERVATION RESERVE

Question: I understand that you recently announced a bonus payment for corn acreage which is signed up for the Conservation Reserve Program (CRP). Apparently, you are having trouble attracting as much acreage into the program as the goals that have been set. Have you considered other methods of attracting more participation into this program?

Answer: Yes, we have tried approaches to attract participation into the program.

Question: If so, what are they? For example, have you considered elimination of the waiting period after land is acquired by a person before he can enter it into the conservation reserve?

Answer: Our decision to establish sub-state bidding pools was based on the need to spread the accepted acres throughout the country. Acceptable bid rates ranged from $20 to $90 per acre and were based on prevailing rental rates for irrigated and dryland within these pools. Without this procedure, the program would likely have been concentrated in a relatively few low cost areas. The objective to attract bids for planting trees was a major reason for the decision to consider gullies on land along with the equation regarding sheet and rill erosion. Also, the decision to consider alfalfa and other grasses in long term rotations should have the effect of increasing participation.

Question: What about full payments being allowed to go to a new owner of land that had already been entered into the conservation reserve prior to its sale to the new owner?

Answer: Decisions regarding the waiting period for purchased land or payments to new owners of land were guided by the need to prevent the program from creating land speculation and the overall $50,000 payment limitation in the law. We think the three year period prior to the CRP signup provides adequate assurance that the purchase was not done primarily for the purpose of entering the CRP.

New owners can receive full payments as long as their total payment from all farms does not exceed $50,000. This limitation is identical to that being required of the contracting farmer.

Question: Given the unpredictability of the amount of land that will be entered into the conservation reserve during the current signup, I expect that you may find reason to change the estimate of how much this program will cost in fiscal year 1988.

If your current estimate of $1,388,000,000 has changed, please provide me with the new figure. I also expect that you will keep the committee apprised of any new estimates you make for this program as the year progresses.

Answer: Yes, we will keep you apprised of any new estimates for the CRP as the year progresses. However, since the program has the flexibility to use commodity certificates as part of the rental payments, the precision of the appropriation estimate is not particularly limiting to the program operations.

WATERSHED CONSTRUCTION STARTS

Question: In the appropriations bill for fiscal year 1987, you are required to initiate construction on not less than 22 projects under the Watershed Protection Flood Prevention Act and not less than 5 new projects under the Flood Control Act. Please list these projects by location and include the amount of funding required.

Answer: The budget proposes to rescind all unobligated financial assistance and cost share funds for FY 1987, effective January 1987. Funds proposed for rescission include $64 million for P.L. 566 and $9 million for P.L. 534. However, the thirteen projects which are ready for consideration as a construction start include:

	STATE	PROJECT NAME	AMOUNT
P.L. 83-566:	Arkansas	Ozan Creek	$345,000
	Georgia	Tesnatee Creek	1,000,000
	Kansas	South Fork	210,000
	Louisiana	Bayou Mallet	500,000
	Maine	Perley Brook	350,000
	North Carolina	Swan Quarter	2,500,000
	New York	Brandywine Creek	800,000
	Oregon	Mt. Hood Irrigation	250,000
	Puerto Rico	Guayanes River	485,000
	South Carolina	Salem Community	400,000
	Tennessee	Portland	300,000
	West Virginia	Middle Grave Greek	1,400,000
			$8,540,000
P.L. 78-534:	Iowa	West Wolf	170,000

If funds are not rescinded, other projects may become ready for a new start as sponsors secure land rights, obtain their share of the funding, or obtain money from the State to start the project.

CCC SUPPLEMENTAL

Question: What is your latest estimate for when you will need a supplemental appropriation for the Commodity Credit Corporation?

Answer: Based on our latest cash flow analysis, CCC will exhaust its funds in late April. However, since it has always been difficult to precisely predict CCC funding requirements, this date could change somewhat. As in the past, the Department will keep this Committee informed on a frequent basis regarding CCC's current cash position.

ENVIRONMENTAL PROBLEMS

Question: Please describe each of your program(s) which directly or indirectly involve or support work on (a) the greenhouse effect, (b) climate change, and (c) stratospheric ozone depletion, including:

(a) basic research efforts
(b) effects on human health, biota, etc.
(c) studies of policy options for avoiding, minimizing, or coping with predicated changes, including use of alternative fuels and substitute chemicals and conservation.
(d) international programs

Answer: All programs relate to basic research and effects on biological and environmental systems. There are no studies on stratospheric ozone, policy options, international programs or human health. We have no programs that involves ozone depletion. The programs that deal with greenhouse effect and climate change follows:

Greenhouse Effects

1. Auburn, AL: Determine effects of elevated CO_2 on root proliferation and depth; forces exerted by roots and resulting root displacement; alterations of plant-water relationships resulting from changes in root systems.

2. Phoenix AZ: Determine long-term effects of continuous CO_2 enrichment on yield, water use, and photosynthesis of crops under optimal and limiting levels of water and fertility. Also to determine effects of CO_2 on physiological determinants of crop productivity, water stress, stomatal behavior and biochemical reactions that limit photosynthesis. Also to determine feasibility of enhancing the rate of leaf photosynthesis and yield of cotton by CO_2 enrichment.

   In 1987 and subsequent years a major portion of the work funded at Phoenix and Gainesville will be done at the Free Air Carbon Dioxide Enrichment (FACE) study near Yazoo City, Mississippi. The cooperative FACE study originated with personnel at Phoenix based on concern that partially or fully enclosed chambers, in which all past CO_2 studies have been conducted, may alter circulatory air movement and sunlight so those studies may not properly stimulate conditions expected when world atmospheric levels increase.

   In the FACE study CO_2 release from circular arrays of standpipes around each plot will be regulated to control CO_2 in the air throughout the plots at specific levels from 300 to 600 parts per million. Cotton growth and water use will be studied.

3. Gainesville, FL: Determine effects of increase CO_2 on photosynthesis, transpiration, stomata, leaf biochemistry, partitioning of assimilates, morphogenesis, growth and yield of agricultural crops. Determine interactions of CO_2, climate, soils, and water availability on the above process. Part of this effort feeds into the cooperative FACE study at Yazoo City, Mississippi, in 1987 and successive years.

4. Mississippi State, MS: Develop mechanistic dynamic process level models of crop growth that respond to changes in atomspheric CO_2 and simulate crop growth and yield in a possible future world with high CO_2 concentration and associated weather patterns. The scientist who has been working on this project is leaving this location and continuation of the study is not certain.

5. Raleigh, NC: Characterize effect of mineral nutrition, atmospheric CO_2 and water stress on carbon and nitrogen metabolism during plant development.

6. Pendleton, OR: Develop a modular CO_2 sensitive model

of winter wheat development, growth and yield, incorporating water and nutrient stress.

7. Temple, TX: Determine whether shifts toward woody species in rangelands have been caused by increasing atmospheric CO_2 levels and if so, to project effect of future increases in CO_2 on rangeland vegetation.

Climate Change

1. Phoenix, AZ: Use information collected in other meteorological studies to derive logical predictions of future climatic changes and analyze the basic foundations of models developed elsewhere to evaluate their potential for estimating effects of atmospheric CO_2 increases on climate changes.

Question: Please indicate your current agency priorities and where, among these priorities, the problems of the greenhouse effect, global climate change, and stratospheric ozone depletion appear.

Answer: The top 20 ARS priorities are listed below. Work on greenhouse effects and climate change is not among these priorities. ARS is doing no work on depletion of ozone in the stratosphere.

Ranking Order	Program/Areas of Emphasis
1	Crop germplasm collection, maintenance, and evaluation
2	Cropping systems and practices to prevent groundwater contamination
3	Assure safety and quality of meat and dairy products for domestic and foreign markets
4	Decrease fats in beef, pork, lamb, and poultry
5	Control of erosion in the Mid-South and Southeast
6	The Food chain and dietary requirements for improved human health
7	Develop new techniques for classifying cotton, peanuts, soybeans, and grains
8	Improve quality of fruits and vegetables for export
9	Develop production practices and predictive models to increase profits for farmers and ranchers
10	Develop diagnostic methods for diseases of livestock and poultry
11	Boll worm/boll weevil population suppression in the Mid South and West
12	Biocontrol of insects, weeds, and diseases
13	Gene transfer technology to improve pest and stress resistance of major crops
14	Eliminate losses due to mycotoxins and storage insects in grains and oilseeds
15	Planning, design, and construction of National Seed Storage Laboratory, FT. Collins, CO.
16	Planning, design, and construction of Poultry Disease Laboratory, Athens, GA
17	Planning, design, and construction of Animal Facility for Human Nutrition Research, Beltsville, MD
18	Planning, design, and construction of Yakima Agricultural Research Laboratory, Yakima, WA

19 Planning, design, and construction of Plant Introduction/ Containment Research Facility, Beltsville, MD
20 Planning, design, and construction of Crop Export and Water Management Research Facility, Fresno, CA

Question: Does your agency have a major thrust or focus with respect to greenhouse, climate change, and stratospheric ozone issues? What are the priorities within your greenhouse, climate change, and stratospheric ozone programs? Are these multiyear efforts? When do you anticipate completing each of these projects?

Answer: The major thrust of ARS is to determine effects of increases in atmospheric CO_2 and temperature on crop growth, which falls in the greenhouse category. These are multiyear efforts, funded at relatively low but sustained levels. The current objectives will, in general, be achieved within the next 5 years if funding levels and personnel can be maintained.

Question: The scientific evidence demonstrates that we already committed to a 2°C increase in global average temperature, and that the effects of global warming may be manifested as early as the next several decades. How have these findings been factored into your planning? How does the magnitude and timing of these changes effect your projects?

Answer: Evidence for increasing CO_2 levels in the atmosphere and projected levels up to 600 parts per million within the next 200 years is accepted and research designed to evaluate effects of these changes on crop growth is planned and underway. Evidence for future increases in global temperature of even 2°C are speculative and based on models whose bases are still questionable. Some considerations predict that global temperature increases resulting from the CO_2 increases will be only a fraction of 1°C and will be well within historical fluctuations of global temperatures. ARS has chosen to use its limited resources for a relatively modest research program designed to allow us to predict effects of increased CO_2 on crop production with minor consideration of effects of increased temperature.

Question: Please provide a detailed accounting on the following, including a breakdown by specific offices/laboratories and projects for each fiscal year.

(A) For the greenhouse effect
  (1) Expenditures in FY 86.
  (2) Appropriations and expected expenditures in FY 87.
  (3) Budget request in FY 88.
(B) For climate change
  (1) Expenditures in FY 86.
  (2) Appropriations and expected expenditures in FY 87.
  (3) Budget request in FY 88.
(C) For stratospheric ozone depletion
  (1) Expenditures in FY 86.
  (2) Appropriations and expected expenditures in FY 87.
  (3) Budget request in FY 88.

Answer: The information follows:

Greenhouse Effect Studies

	Expenditures 1986		Expected Expenditures 1987		Requests for 1988	
	USDA	DOE*	USDA	DOE	USDA	DOE
Auburn, AL	45	50	45	50	45	50
Phoenix, AZ	119 46	145	119 46	145	119 46	145
Gainesville, FL	15	210	15	210	15	210
Mississippi State, MS	200	100	200	100	200	
Raleigh, NC	20		20		20	
Pendleton, OR	10	10	41	54	41	54
Temple, TX	25		25		25	
TOTALS	480	515	511	559	511	459

*DOE pass-through to USDA-ARS

Climate Change Studies

	Expenditures 1986	Expected Expenditures 1987	Requests for 1988
	USDA	USDA	USDA
Phoenix, AZ	15	15	15

Question: Please describe how your agency's efforts are coordinated with those of other federal agencies and the scientific community.

Answer: ARS work in this subject area is jointly supported by ARS and DOE. Plans are developed with inputs from both agencies. On large projects such as the FACE programs, which will expend over $1,000,000 over the next 2 years, peer scientists from other agencies and from universities are asked to review the plans.

Question: What do you see as the five highest priority research needs in the area of greenhouse effect, global climate change, and stratospheric ozone depletion?

Answer: The information follows:

1. To determine effects of greenhouse effects including increased atmospheric CO_2 levels on crop production and crop water use.
2. To determine effects of increased CO_2 levels on growth

on noncrop species, including weeds and woody plants and assess the pressures this will impose on range and no-till cropping systems.

3. To determine effects and interactions of increased CO_2 and water stress on photosynthesis and other physiological factors which affect crop yields.
4. To determine whether there are sufficient varietal differences in reaction to CO_2 increases to warrant consideration of this factor in crop breeding programs oriented to the future climatic conditions.
5. To help determine whether the greenhouse effect (i.e. significant temperature changes due to increased CO_2 levels) is going to occur by considering all significantly relevant factors.

QUESTIONS SUBMITTED BY SENATOR SASSER

BUDGET PROPOSALS

Question: Mr. Secretary, as I indicated, I am very concerned that your budget proposals will exascerbate the development of two-tier economies in many states. Indeed, taken as a whole, your proposals promise a very bleak future for rural America.

Your budget contains some $21 billion in agricultural spending reductions over the next five years in just price support programs alone. Now the Congressional Budget Office estimates that these cuts will dramatically reduce net cash income to farmers. They go further and suggest that these cuts could push as many as 12,400 farmers into an unmanageable debt position.

So you can see why I believe your proposals do little more than aggrevate an already intollerable situation. So rather than offering some hope of growth and development to rural areas, you have proposed a budget that would spell disaster for many thousands of farmers. Is that not true?

Answer: No, I do not believe it is accurate to say that our budget proposals will lead to the bleak future for rural America that you have pictured.

RURAL DEVELOPMENT

Question: Mr. Secretary, the Farmers Home Administration has historically played a key role in Rural Development. Last year alone, my home State of Tennessee received $73.5 million worth of assistance for rural housing. The Rural Housing Insurance Fund provided close to $2 billion across the country in fiscal year 1986. And the loan programs here are limited to rural areas of not more than 10,000 in population.

Clearly, this a program which directly benefits rural communities. Yet, your budget proposes sweeping cut-backs here. By denying future use of this program, aren't you turning your back on a key element of rural development?

Answer: Rural communities will share in the economic benefits that will be achieved by reducing the federal deficit. These benefits include more economic growth and better job opportunities. Communities will need to compete for these benfits however.

In order to reduce the federal deficit, there must be cut-backs. The decision to include FmHA's existing Rural Housing Programs in these cut-backs was difficult but necessary. These programs are very costly--about $3 billion must be appropriated annually just to pay the subsidy cost on past loans. Any new loan activity would simply add to these costs. Alternatively, the President's 1988 Budget provides for about $400 million to be appropriated, in advance, to cover the cost of about 21,000 units under a new Rural Housing Voucher Program. This Program would allow eligible applicants to obtain adequate housing of their own choosing. It would be similar to the housing voucher program administered by the Department of Housing and Urban Development (HUD).

Question: The Rural Development Insurance Fund operated within the Farmers Home Administration is critical to maintaining the infrastructure in many rural communities. In the words of your agency, "The Farmers Home Administration provides a source of funding for water and waste disposal systems and essential community facilities to those rural communities that are unable to obtain private financing. Without the aid of the Federal Government, these communities, which are mainly low-income and sparsely populated, would have no other source of financing available with terms or conditions they could meet."

Your budget proposes zeroing out this program. Where some $500 million is now being used to maintain critical rural infrastructure needs, you suggest we simply halt all funding. Where are these rural communities supposed to find assistance necessary for these essential facilities if your proposal is approved? USDA has already admitted such communities are unlikely to find terms and conditions they can meet in the private market.

Answer: This cut-back is also necessary to reduce the federal deficit. I should be noted, however, that zeroing-out FmHA's rural development loan program does not mean that rural communities will be unable to finance water and waste disposal systems and other essential facilities. Private financing is available for this purpose, and it can be obtained at reasonable rates and terms. Granted, not all rural communities will be able to qualify for private sector financing, but those communities with good long-term prospects for repayment and a willingness to make a commitment to pay for these facilities should be able to obtain financing. In some cases, state governments may be able to help rural communities locate and quality for such financing.

EXTENSION SERVICE PROGRAMS

Question: The Department of Agriculture's own figures indicate that for every $1.00 invested in Extension Service programs, the Extension Service generates $2.00 in increased productivity of Amgerican agriculture. Yet, your budget for 1988 would decrease funding for the Extension Service by more than $60 million from 1986's level. Given the positive impact of Extension Service programs on rural economies, how can you justify this step which by your own arithmetic would mean decreasing farm productivity?

Answer: The Extension Service does provide positive impact throughout the nation's agricultural community, something they have been doing for almost 75 years. The basic formula funding programs within Extension Service are not being reduced. These are, in fact, being increased by over $9 million. These are the funds that generate the additional 2 to 1 increase alluded to. The reductions in Extension are for specifically targeted programs that have been established for some time and are not addressed in the basic Extension programs of the States or can be continued using other resources within the Cooperative Extension System.

CONSERVATION TECHNICAL ASSISTANCE

Question: Proper stewardship of our soil is also essential to rural development. And you have noted that technical assistance is essential to implementing a viable soil conservation program. Yet, your budget calls for a reduction of over 4,000 staff years in the Soil Conservation Service next year alone. This flies in the face of requests made by national conservation groups. Indeed soil conservation experts in Tennessee tell me that they are in desperate need of more workers to implement conservation programs.

How can you reconcile your proposed cuts in this area with the critical need for technical assistance which is so vital to maintaining our most valuable natural resource--our soil?

Answer: The budget does not propose cuts for SCS technical assistance. The reductions to SCS staffing are associated with the termination of RC&D, watershed construction programs, and other lower priority activities. Considering the fact that SCS has about 3,900 county-level technical assistance staff years available for direct program operations, we are confident that this available staff can handle the job. There would of course have to be some temporary assignnents of personnel to match the geographic distribution of the FSA workload. The current county technical assistance staff is already, in part, devoted to work that is similar to that needed to implement the FSA.

Moreover, we have reason to be encouraged that, as a result of some innovative approaches the SCS has recently developed, there are significant opportunities to improve SCS efficiency in the development of conservation plans. For example, Illionis has developed a training package which coordinates Extension Service and SCS efforts in helping a group of 25-30 farmers design their conservation plans rather than the conventional one-on-one tutorial approach. All states are being presented with this package and will have an opportunity to adopt it. The Department of Education is assisting in preparing materials to be used by Vo-Ag teachers with 200,000 students on projects designed to facilitate conservation compliance. The potential to use these materials by 4-H and Future Farmers of America are being explored also. Private land contractors have indicated an interest in applying conservation practices on a fee basis. Some farmers may wish to avail themselves of the private sector alternative rather than relying on free assistance from the government.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

PROPOSED 0/92 PROGRAM

Question: Mr. Secretary, I understand the Department will be offering a package of changes to the 1985 Farm Bill which will include the 0/92 program, wherein producers could receive 92 percent of their deficiency payment if they planted none of their permissible acres. I believe this would be a flawed program. Ninety-two percent of normal deficiency payments may not encourage large participation when producers cannot plant alternative non-program crops as they can in the 50/92 program. Since only normal deficiency payments will be used, if prices rally and reduce the spread between the price and the target, there will be a reduction in payments. The 0/92 participants will have to bear the full risk. Wouldn't you agree that price increases, the goal of this program, would severely damage the participants under this scenerio? What would you propose to do about this problem.

Answer: The 0/92 program as envisioned by the Administration would simply be an extension of the 50/92 program. It is true that producers participating in either the 50/92 or 0/92 are at risk since no payment guarantee is provided. However, the program would only be offered when there were large surpluses. Thus there is strong likelihood that the maximium payment rate would prevail. If prices were to increase, it is true that this may limit the incentive to participate in the program since payments, which are based on the difference between the market price and the target price, would be reduced.

PAYMENT LIMITATION

Question: Another part of this package is to include a $50,000 limit for deficiency payments, marketing loan differential payments for rice and cotton, Findley loan differential payments for wheat and corn, diversion payments and some types of conservation payments. You have repeatedly pointed to the marketing loan as a bright spot of the 1985 act, yet this limit would certainly kill the rice and cotton programs. Does the Department intend to include loans in this payment limitation proposal?

Answer: The Administration's proposal regarding changes in the payment limitation will be released soon. Under current law, Findley deficiency payments, marketing loan gains, loan deficiency payments, inventory reduction payments, and disaster payments, together with the regular deficiency and diversion payments which have been available under previous legislation, are subject to a total payment cap of $250,000 per person. It is likely that most of these except diversion payments will be included in any tighter payment limit that might be proposed.

Price support loans on commodities other than honey are not now under any limit and would not be included in the proposed tighter limit.

FMHA GUARANTEED LOANS

Question: I note that the Department is continuing to place much greater emphasis on guaranteed farm operating loans than on direct loans. The guaranteed loan program is unfortunately a dismal failure in Arkansas. A farmer who is currently strong enough to be with a bank may be a recipient of a guaranteed loan but no bank will pick up a former direct borrower of the FmHA just because of the guarantee program. Therefore, FmHA will only be of assistance to a few lucky direct borrowers and financially strong borrowers already with other lenders. Where do you therefore propose new and young farmers should turn for help, without the availability of the FmHA direct loan Program?

Answer: Farmers are delaying purchase of land and long-term capital to avoid carrying too much debt. Increasingly, successful young farmers are renting a greater share of their land and equipment. FmHA can work well with commercial banks to serve the short and intermediate credit needs of these farmers. The 1985 Farm Bill authorizes FmHA to provide assistance to young and beginning farmers through sales of inventory property on an installment basis at prices reflecting the agricultural value of the farm. The 1985 Farm Bill also authorizes the shift from direct to guaranteed loans. The department proposes that the full amount of funds authorized by the Farm Bill for direct loans be used for operating loans.

Question: With banks not willing to take on the additional risks of lending to farmers through the guaranteed program, and with only very limited direct loan money available, how do you propose that the FmHA will be an effective lending source at a time when credit is especially tight due to low prices, the 60 percent decline in equity values since 1981, the specter of Chapter 12, the refusal of the USDA to honor contracts, as in Arkansas, and the non-assignability of commodity certificates which make up half of the deficiency payments?

Answer: We believe the guaranteed loan program will increase the effectiveness of FmHA assistance programs. The guaranteed loan program helps other lenders help their borrowers. For example, a banker can use the guarantee to stretch out a loan to a troubled borrower.

The guarantee program has grown dramatically in recent years. We will continue to review and revise procedures as necessary to assure continued growth in the program. For example, FmHA is currently reviewing the effect of the new bankruptcy law on our loss payment procedures. We expect changes will be proposed to lessen delays in appropriate payments to lenders.

QUESTIONS SUBMITTED BY SENATOR COCHRAN

FAS PROGRAMS AND STAFFING

Question: The enactment of the 1985 Farm Bill mandated several new export programs, such as the Export Enhancement Program, Targeted Export Assistance (TEA), intermediate credit, dairy sales and expanded Section 416. Obviously, with increased responsibilities and activities comes increased workload and staff support. I notice, however, that FAS has had a gradual decline in staff resources. In fact, over the past ten years, FAS has been cut almost 100 positions. Will you please explain how these new programs are being implemented without additional resources and staff?

Answer: For the time being, the Foreign Agricultural Service has had to reduce or discontinue some of the functions and services for which it had previously assumed responsibility in order to implement the new programs and functions assigned by the Food Security Act of 1985.

Question: What previous responsibilities and programs administered by FAS have been displaced?

Answer: The redirection of personnel and financial resources to the programs mandated by the Food Security Act of 1985 has necessitated a reduction in the following areas: short and immediate-term demand analysis and electronic transmission of data; development and implementation of trade initiatives to counter competitor incursions into U.S. agricultural export markets; coordination, planning, and evaluation of ongoing cooperator foreign market development programs; responses to public inquiries and foreign trade problems and complaints.

Question: If supplemental funding could be provided, how many staff years are needed and what is the appropriate level of funding?

Answer: We have submitted a supplemental budget request for the Office of the General Sales Manager which provides for $705,000 and 10 staff years to support farm bill related workload in FY 1987. This supplemental has also been incorporated into the FY 1988 budget request base.

HONEY PROGRAM

Question: In a letter dated January 30, 1987, several Senators joined me in signing a letter to you concerning the new limitations on farm program benefits, and their particular impact on the honey industry -- a copy of the letter follows. The limitations placed a cap on the amount of payments a producer can receive and also limit the individual price support loan levels under the honey program. The honey industry, as I understand, is the only industry "hit with a double dose of limitations." It this true?

Answer: The honey industry is the only industry that has an outstanding loan limitation. The FY 1987 Continuing Resolution placed a cap of $250,000 on their commodity loans at less than the original loan level and also limited to $250,000 the amount of outstanding honey loans permitted, less the gains realized through a lower loan repayment level.

LETTER FROM SENATOR COCHRAN, ET AL.

The Honorable Richard Lyng
Secretary of Agriculture
Department of Agriculture
Washington, D.C. 20250

January 30, 1987

Dear Mr. Secretary:

In the closing days of the 99th session of Congress, the House of Representatives included an amendment to the continuing resolution imposing new limitations on farm program benefits. Included in this amendment was a provision which singled out honey for a more stringent limitation. The effect of the honey provision will be to depress the market price for honey, increase the workload on ASCS and actually increase the cost of the program.

The amendment will force a handful of large honey producers to market their production exceeding the loan limit. Buyers know that these producers have to sell this honey. The dumping of this honey on the market will have a depressing effect on prices in the domestic honey market. The lower market prices for honey will increase the cost of the marketing loan program.

The limitation on the amount of honey one producer can have under loan at one time will force the producer to continue to sell his honey under loan and to then take out another loan. Producers will be forced to go into their ASCS office dozens of times to process loans and sales of honey. This will increase the workload on an already overworked ASCS workforce.

The amendment gave the Secretary of Agriculture discretionary authority to raise the limitation under certain circumstances, for example, if the limitation depresses market prices. Since the specific limitation on the honey loan program will certainly depress market prices and increase the cost of the loan program, we urge you to consider using your discretionary authority to eliminate the loan cap and implement the same payment limitation on honey as in effect for other commodities. Honey would be treated in the same manner as all other commodities and the price depressing effect would be eliminated.

Thank you for your consideration of this important matter.

Sincerely,

Larry Pressler
Larry Pressler

Rudy Boschwitz
Rudy Boschwitz

Kent Conrad
Kent Conrad

David L Boren
David L. Boren

Thad Cochran
Thad Cochran

Tom Daschle
Tom Daschle

Chuck Grassley
Charles E. Grassley

Question: The amendment as contained in the Continuing Resolution did give the Secretary some discretionary authority to raise the limitation under certain circumstances, for example, if the limitation depresses market prices. The specific limitation on the honey loan program will certainly depress market price and increase the cost of the loan program. Do you intend to use your discretionary authority and eliminate the loan cap so that the same payment limitation on honey is in effect as for other commodities?

Answer: The Department of Agriculture has carefully examined this matter, analyzing the effects of both the honey outstanding loan limit and the payment limitation, included in the 1985 Act. It was determined that these loan and payment limits will neither substantially affect market prices nor result in a substantial increase in honey loan forfeitures. Therefore, we have concluded that an upward adjustment in the loan limitation is not warranted.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

BIENNIAL BUDGET CYCLE

Question: Calls for budget reform are increasingly heard as budget deadlines are too often missed, important budget decisions are delayed, appropriation bills and other direct spending legislation are held up in committee, and omnibus spending bills take the place of timely and orderly consideration of individual bills. One procedural reform that is being considered is the two-year budget cycle where budget and appropriations matters would be considered in the first year, and authorizations and oversight would be undertaken in the second year. Would your department favor a biennial budget process? What benefits would your department achieve in a two-year appropriation cycle.

Answer: The Department of Agriculture would have much to gain from a two-year appropriation cycle. The major benefit would be the opportunity for improved program management which would result from more predictable and stable funding levels. There would also be substantial savings in paperwork and the opportunity for policy officials to spend more time dealing with substantive issues rather than with the procedural requirements of the budget process.

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: The Department of Agriculture receives its funding from the Congress in 83 separate appropriation accounts. However, 12 of these accounts provide over 80 percent of the Department's total funding. These 12 accounts are for the food assistance programs, the Commodity Credit Corporation, and the revolving funds of the Farmers Home Administration. These programs are the most difficult to predict because they are the most sensitive to economic conditions and other uncontrollable factors. The remaining 71 accounts provide funding for most of the Department's labor intensive programs and grant programs. Funding needs for these programs are relatively predictable and could be handled on a two-year basis.

Question: What difficulties can you foresee in preparing and submitting a two-year budget to the Congress?

Answer: The President's budget already includes estimates for the out years. Therefore, it would seem that the President's budget could incorporate a two-year appropriation request without a great deal of difficulty. As indicated above, the primary difficulty would be in estimating requirements of the food assistance programs, the Commodity Credit Corporation and the revolving funds of the Farmers Home Administration. Potential problems with the CCC would be greatly reduced if the Congress were to approve the Administration's proposal to increase the CCC line of credit with the Treasury from $25 billion to $40 billion. With a sufficient line of credit, CCC would be able to meet changing funding needs by borrowing funds from the Treasury rather than submitting supplemental requests to the Congress. In the case of the Farmers Home Administration revolving funds, these funds have authority to borrow from the Treasury and therefore can meet their cash requirements without congressional action. However, conditions can sometimes require changes in the authority levels from new loans and changes in loan levels do require congressional action. The food assistance programs are funded strictly through appropriations and would therefore be subject to the need for changes in appropriation requests within a two-year period.

SUBCOMMITTEE RECESS

Senator BURDICK. This ends today's hearing. Our next hearing will be held on Wednesday, February 25, in room SD–138 at 2 p.m. At that time, the subcommittee will hear from representatives of the Soil Conservation Service, and the Agricultural Stabilization and Conservation Service.

This hearing is now in recess.

[Whereupon, at 3:25 p.m., Monday, February 23, the subcommittee was recessed, to reconvene at 2 p.m., Wednesday, February 25.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

WEDNESDAY, FEBRUARY 25, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2 p.m. in room SD–138, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Harkin, Cochran, Kasten and Grassley.

DEPARTMENT OF AGRICULTURE

STATEMENT OF GEORGE DUNLOP, ASSISTANT SECRETARY FOR NATURAL RESOURCES AND ENVIRONMENT

ACCOMPANIED BY:

RICHARD GOLDBERG, DEPUTY UNDER SECRETARY FOR INTERNATIONAL AFFAIRS AND COMMODITY PROGRAMS

ROBERT SHERMAN, DEPUTY BUDGET OFFICER

AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE

STATEMENT OF MILTON HERTZ, ADMINISTRATOR

ACCOMPANIED BY DAVID HALL, BUDGET OFFICER

SOIL CONSERVATION SERVICE

STATEMENT OF WILSON SCALING, CHIEF

ACCOMPANIED BY GALEN S. BRIDGE, DEPUTY CHIEF FOR PROGRAMS

OPENING REMARKS

Senator BURDICK. The subcommittee will please come to order.

Today, we are continuing our hearings on the fiscal year 1988 budget for the Department of Agriculture. Specifically, we will consider the budgetary proposals for the conservation programs administered by the Soil Conservation Service and the Agricultural Stabilization and Conservation Service.

We are pleased to have with us Mr. George Dunlop, Assistant Secretary for Natural Resources and Environment, as well as Richard Goldberg, Deputy Under Secretary for International Affairs and Commodity Programs, as well as Mr. Wilson Scaling, the Chief of the Soil

Conservation Service, Mr. Milton Hertz, the Administrator of the Agricultural Stabilization and Conservation Service, and Mr. Robert Sherman, the Director of the Budget, Legislative and Regulatory Systems for the Department.

Welcome to the committee, gentlemen.

No matter how many times this administration is told by Congress that it does not support and will not enact the elimination of our conservation programs, it continues to ask Congress to do so. Once again, we are faced with a budget that eliminates all of the cost-share programs under both the Soil Conservation Service and the Agricultural Stabilization and Conservation Service.

In addition, the President, in this budget, has proposed a rescission of almost $300 million in 1987 funding for these programs. For 1988 funding, the administration proposes to cut approximately $350 million from these two agencies for conservation programs.

In their stead, the administration requests almost $1.4 billion to carry out the conservation reserve program. Under this program, in exchange for entering land into the reserve, farmers will receive an annual rental payment in cash or CCC commodities under 10-year contracts. In addition, farmers will receive one-time payments of 50 percent of the eligible costs of establishing vegetative cover on the reserve acreage.

This is a new line item appropriation for our committee. In the past, the conservation reserve program was funded through the Commodity Credit Corporation.

The 1985 farm bill contained, in addition to the conservation reserve program, the so-called sodbuster and swampbuster provisions. Now, a year and a half after passage of that legislation, the final regulations still have not been issued for this program. Nevertheless, farmers are being asked to sign up in compliance with the sodbuster and the swampbuster provisions. I cannot understand how they are supposed to sign up for these provisions when the final regulations are not out.

Gentlemen, I look forward to discussing these and other conservation issues with you today, and I appreciate your appearing before the committee.

At this time, I would like to recognize the Senator from Iowa.

Senator GRASSLEY. Mr. Chairman, I am not going to make an opening statement. Part of it is a matter of efficiency and fairness to my member colleagues, because sometimes I ask all questions and make statements prior to asking the questions. I will reserve my time for my part of questioning.

Senator BURDICK. You may proceed in any order you wish. I have been told Mr. George Dunlop leads off.

STATEMENT OF GEORGE DUNLOP

Mr. DUNLOP. Thank you very much, Mr. Chairman. We certainly do appreciate the opportunity to come before your committee. I have some testimony that has been prepared and will be submitted for the record, if we may.

I would just like to proceed to outline three points that we emphasize in my testimony, and then following my presentation, perhaps Mr. Goldberg would have some comments and then Mr. Scaling would go into the detail of our Soil Conservation Service budget.

The three factors I would like to focus on just for a few moments are, first of all, the degree to which the fiscal situation drives our budget request; second, the focus that we have on the conservation priorities in our budget; and third, this administration's commitment to achieve our goals with the workload difficulties that we face.

So then, the major factor in our 1988 proposal is, indeed, the difficult decisions that we have when it comes to making clear choices regarding priorities for federal spending. There is no question that the need to put the deficit on a declining path, as is envisioned in the Gramm-Rudman-Hollings Act, is a major driving force in our proposal. Perhaps all of us wish that weren't so, but the fact of the matter is that we have to live under these constrained budget situations.

But that doesn't mean that our commitment to achieving soil conservation goals is diminished. Indeed, it is second to none. We think we have an aggressive and attractive program that can be carried out even under this modest budget.

CONSERVATION PRIORITIES

I should point out that even though we talk about a modest budget and numbers that are lower than they have been in the years past for specific activities, in fact, the soil conservation total outlays for the Department will more than double compared to 1986.

The total request 2 years ago for all conservation activities was about $904 million, and this year, it will total in excess of $1,864,000,000. So our total spending in this regard has doubled. We believe that the types of savings that we can get in the soil conservation budget in particular are warranted in light of that.

The major policy emphasis of our budget does focus on the conservation priorities that are found in the Food Security Act—that is, the 1985 farm bill.

Our effort is pretty much totally directed toward meeting the technical assistance and the conservation operations of the farm bill. As you indicated in your opening remarks, Mr. Chairman, the farm bill has four major tools we have never really had before: the sodbuster, the swampbuster, the conservation compliance and the conservation reserve. We are thoroughly committed to these. We believe that we have an unprecedented opportunity, the most important opportunity we have ever had in soil conservation, to achieve tremendous accomplishments.

Our commitment to that is just overwhelming. We believe that our budget warrants the attention that we give to it and the focus that we give to it.

We have in this country 118 million acres of highly erodible land. That represents 28 percent of the total of about 417 million acres under production. Of this 118 million acres, farmers already manage about 35 million of that in a way that protects their land from unacceptable erosion.

That leaves about 83 million acres of highly erodible land on which conservation compliance will apply. Farmers have three choices in regard to those lands, Mr. Chairman: One, they can bid up to 45 million acres of that 83 million into the conservation reserve.

Two, they may develop, by 1990, a conservation plan that is to be approved by the local Board of Conservation Districts, and if they choose to operate under the USDA farm programs, they must have, by 1995, application of those plans completed. So we have 2 years to develop conservation plans on these 83 million acres and 7 years to get the application into place.

The third option the farmers have, of course, is to do as they wish with their land. If they wish to continue practices which may not comport to prudent use of their land, they are certainly free to do so, but they would have to do it without the benefit of federal subsidies and other programs that the Department of Agriculture has for farmers.

Of course, all this is not necessarily an idea that the administration came up with on its own. The Congress is thoroughly committed to it, and it is the law. Already, we have about 9 million acres in the conservation reserve, and our expectation is to get 28 million acres by the end of fiscal year 1988. Perhaps we can even do better than that.

We believe that by concentrating our federal resources on the most highly erodible cropland, we can significantly improve overall conservation effectiveness, even with the modest Soil Conservation Service budget that we ask you to consider today.

FOOD SECURITY ACT WORKLOAD REQUIREMENTS

Perhaps one of the areas of greatest concern to all of us who have a commitment to soil conservation is the third point I would leave you with, Mr. Chairman. That is the Food Security Act workload requirements.

Are we going to be able to achieve all these goals that we see with the budget we have? Is the workload requirement going to overwhelm us or not? That is the salient question. We believe we can answer that in the negative. We are not going to be overwhelmed by it. We believe we can live under the budget request we have asked for and are very enthusiastic about it.

These four new instruments of policy are going to focus on conservation operations. This increase that we seek in the conservation operations area is a modest increase, but it will allow us to maintain four priority programs and expand them a little bit. Technical assistance to the farmers; the soil surveys—that is the soil mapping work that is so necessary for these programs to proceed in the soil surveys—and other attendant types of core programs will be continued.

CONSERVATION PLANNING INNOVATIONS

Our peak workload years will be 1988 and 1989. There is no question that this is going to impose a tremendous challenge on us, but we do feel that we can do it. I might ask the indulgence of the committee for just a moment to point out some of the things that we are doing to meet this workload requirement.

The first thing I would point to is the increased efficiency that we are getting in the operation of the Soil Conservation Service. In the past 12 months we can demonstrate a 13-percent increase in the efficiency of our operations. Our people are out there working harder and working smarter. They are doing all kinds of things that are allowing us to carry a bigger load with fewer people.

We are very, very pleased with that. The use of group planning is under way right now. The usual way we do conservation plans with the farmers is to bring each one in, kind of on an individual basis, and sit down to look at his particular farm. I brought along a map that I picked up yesterday when I was in a district in Illinois. The document looked something like this, with the fields outlined. Maybe you can see it in black. We sat down with them one-on-one and went over this.

In Illinois, which is taking the lead on this, we will work with 12, 15 or 25 farmers, however many we can take, and go through a lot of these conservation planning activities on a group basis. We plan to do this all over the nation and hope to improve our efficiencies in that way.

We have discussions under way now with the Department of Education, which has an Office of Vocational Agriculture that works in all of the 50 states. There are more than 250,000 people involved in vocational agriculture. Many, many thousands of these people live on farms. We are going to use that vocational agriculture system to help teach them how to do some of this conservation planning work.

We are already having discussions with the Future Farmers of America, the 4–H and other types of organizations active in rural America and that have a real interest in helping to get these things done.

Of course, we have always had the help of private sector people, private land contractors and others who are willing to engage in these types of activities for a fee. Some farmers will be in a position where they will be willing to pay a fee to get the work done quickly. Not all will, but some will, and those people are there to serve them.

VOLUNTARY ASSISTANCE ON FARM BILL WORK

One new initiative that we have just undertaken, and which we are depending on a great deal, is our earth team. This is our system of volunteers that we have in the soil conservation area. The Forest Service, another agency for which I have responsibility, has 44,000 people right now who are volunteering to help us run the national forests. We couldn't operate the national forests without those volunteers. They do meaningful and substantive work. Through our earth team efforts and other volunteer efforts available to the soil and water conservation districts, we believe that we can get lots of people to help us with these workload requirements.

Indeed, the soil and water conservation districts themselves are very active. As I related to you yesterday, I was in Peoria County, Illinois, and we visited with the soil and water conservation district people there. They are getting increased funding from their county, from their state and, indeed, from individual farmers themselves, who are giving the capital, the time, and the people that it takes to carry out a lot of this work.

So our hope is that with the core technical abilities that we have in the Soil Conservation Service, and the cooperative efforts of all these other people, we will get the job done. With the conservation ethic that we have in this country, it will be more than just the government's problem.

Right now, with the way we operate some of our activities, a lot of farmers out there—50 years we have been working in this—a lot of farmers take the attitude, "Well, soil conservation is not my problem. That's the government's problem." The reason they have part of that attitude is the government has always done all of these things for them for free and has not involved them. We came out there on their land and we did the work for them. Now, by involving people in this work, it gets them intimately and directly involved in this whole process. We really hope to be able to expand the conservation ethic and to treat that 60 percent of the land that has not gotten these treatments over the past 50 years.

So we are very enthusiastic about the opportunities to operate these new tools even under this constrained budget situation.

CONSERVATION PROGRAM REDUCTIONS

Finally, I should not ignore the fact that there are lots of activities that the Soil Conservation Service has traditionally provided that we are not going to be able to continue. When we put our major effort into these very vitally important instruments provided by the Food Security Act, we are going to have to put some of these other things on the back burner for a couple of years. Some of this is the work we would like to do, and some that it makes sense to do. But we think we will not lose sight of the fact that the work is there and needs to be done in the future.

We are urging states to take on more responsibility for financial assistance, watershed construction, the Great Plains program, and the RC&D program.

You mentioned in your opening remarks, Mr. Chairman, that every year the administration comes up and says, "We don't want money for those purposes." We don't dispute that those purposes are useful. We honestly do believe that the money we get from the appropriations process should be directed to the Food Security Act over the next 2 years.

I guess the bottom line is that we are very excited and enthusiastic about the opportunities we have before us. Many of the members of your committee were involved in writing these new instruments into law. We trust that they will keep a careful and watchful eye on us to make sure we do a good job.

PREPARED STATEMENT

We thank you for this opportunity to share our basic thinking about the budget proposal with you.

Senator BURDICK. We thank you.

[The statement follows:]

STATEMENT OF GEORGE S. DUNLOP

Mr. Chairman and members of the Committee, I appreciate the opportunity to appear before you today to discuss the Administration's 1988 budget proposals as they relate to the conservation programs of the Soil Conservation Service. Mr. Scaling, Chief of the Soil Conservation Service, and some members of his staff are here with me. Mr. Scaling will present a statement in support of the budget, and he and his staff will help me respond to your questions.

NEED TO CURTAIL SPENDING

This budget reflects, as it has for the past several years, the need to make hard choices regarding priorities for Federal spending. Although many of this Administration's goals for economic prosperity have been achieved, we are still faced with unacceptable and persistent Federal deficits which, if not dealt with, will threaten the continued prosperity of the Nation. One of the major objectives of this budget is to keep the deficit on a declining path and to meet the $108 billion deficit target for fiscal year 1988 called for in the Gramm-Rudman-Hollings legislation. The curtailment of Federal spending, we believe, is the first step to be taken to achieve this goal. We are, therefore, presenting here today a budget request for the Soil Conservation Service that focuses limited Federal resources only on the most important soil and water conservation problems. It is a budget request which reflects our continued commitment to achieving important soil and water conservation goals. The Department's total request for soil and water conservation programs is $1,864 million for fiscal year 1988, compared to $904 million spent in fiscal year 1986.

FY 1988 CONSERVATION PRIORITIES

For USDA soil and water conservation programs, our highest priority is to provide the technical assistance needed to support implementation of the Conservation Title of the 1985 Food Security Act. This new law provides an unprecedented opportunity to bring about a substantial and more permanent improvement in the health of our Nation's natural resource base. Its various provisions are directed at those lands where our most serious erosion currently exists or where it could develop from improper use of the land.

About 118 million acres, or 28 percent of the Nation's existing cropland, is subject to the conservation compliance provisions of the law. These lands account for about 58 percent of all cropland erosion or about 1.8 billion tons of erosion annually. Farmers already manage 35 million acres of this cropland so it is protected below the soil loss tolerance level. Obviously, these farmers are practicing effective conservation through crop rotations, conservation tillage, strip cropping, contour cropping, grass waterways, terraces, and other measures. These farmers would be certified as already being in compliance with the conservation requirements. Of the remaining 83 million acres, farmers can (1) bid up to 45 million acres into the Conservation Reserve Program and receive rental payments for 10 years, (2) develop a conservation plan to acceptable levels by 1990 on the remaining 38 million acres and implement it by 1995, or (3) forego the USDA program benefits and continue the current conservation practices.

There are 5.2 million acres of existing wetlands having a high potential for conversion to cropland that would fall under the so-called "swampbuster" provisions. Another 225.7 million acres of all other agricultural lands have a high potential for conversion to cropland. We project that about 5 million of these acres could be broken out by 1990 and could therefore, fall under the "sodbuster" requirements of the Food Security Act. In addition, after three enrollments held in 1986, USDA has accepted nearly 9 million acres of highly erodible cropland into the Conservation Reserve Program and nearly 6 million acres of commodity program base have been reduced. The Department expects an enrollment of 28 million acres by the end of 1988. Erosion savings on these lands is expected to be 25 tons per acre annually, a substantial soil savings which, together with those lands being addressed under the conservation compliance provisions, will result in tangible progress towards reducing erosion on cropland that is currently eroding above the tolerable levels. We believe, Mr. Chairman, that by concentrating Federal resources on the most highly erodible cropland, we can enhance our overall conservation effectiveness even with the constrained budget we have before us today.

FOOD SECURITY ACT WORKLOAD REQUIREMENTS

The focus of the 1988 budget, then, is on servicing the workload generated by these new conservation requirements. Funds are requested to continue our core conservation programs for technical assistance, soil surveys, snow surveys, and operation of SCS plant materials centers at about the current operating level. Because we must have up-to-date soil survey data before we can determine which lands on a particular farm meet the definition of highly erodible land or wetland, the budget includes an increase of $6 million to accelerate soils mapping in areas where these lands are most likely to occur and where adequate soils data are not currently available.

We anticipate that 1988 and 1989 will be our peak workload years for providing assistance to producers seeking to comply with the January, 1990, deadline for the conservation compliance requirements of the Food Security Act. Highly erodible land and wetland determinations are projected to be needed on over 2 million farms and nearly half of these farms will need to have conservation plans prepared during this time period. There is no question that this will pose a significant workload on the SCS's field office staffs unless some innovative steps are taken. Let me explain some of the grass roots efforts underway. Illinois has developed a training package which coordinates Extension Service and SCS efforts in helping a group of 25-30 farmers design their conservation plans rather than the conventional one-on-one tutorial basis. All states are being presented with this package and will have an opportunity to adopt it. The Department of Education is assisting in preparing materials to be used by Vo-Ag teachers with 200,000 students on projects designed to facilitate conservation compliance. The potential to use these materials by 4-H and FFA are being explored also. Private land contractors have indicated an interest in doing work on a fee basis. Some farmers may wish to avail themselves of the private sector alternative rather than relying on free assistance from the government.

SUMMARY

The USDA is committed to providing the assistance needed to implement these historic and important conservation initiatives. This presents us with a tremendous challenge and, at the same time, a real opportunity to deal with some serious erosion problems that have eluded us in the past.

We are not overlooking or down playing the fact that some real sacrifices will be required in order to accomplish the objectives of the law during a time when our fiscal resources are constrained. You will recognize in this budget request, many of the same proposals made in past years to eliminate our financial assistance programs, watershed construction, Great Plains, Resource Conservation and Development and other programs that have been offered in the past as part of our Federal conservation effort. Our position is not that these programs are ineffective, but it is simply that we can no longer afford to use Federal deficit dollars to fund them in light of other priorities and the pressing need to hold the line on Federal spending. While choices such as these are not easily made, we believe that the budget we are presenting here today will make the most effective use of the Federal dollars that we can afford to allocate to conservation programs at this time.

We are excited and enthusiastic about the opportunity we have to use the new policy tools in the Conservation Title of the 1985 Farm Bill and look forward to working with the Committee in putting our mutual goals into effect.

That concludes my statement, Mr. Chairman. I will be happy to respond to any questions.

SOIL AND WATER CONSERVATION PROGRAMS
(Funding in Millions)

Agency/Program	1986 Actual	1987 Current Estimate	1988 Budget	1989 Budget
Soil Conservation Service:				
Conservation Technical Assistance	$270.9	$297.8	$314.2	$314.2
Soil Surveys	54.3	58.1	67.7	67.7
Snow Surveys	3.8	5.0	5.4	5.4
Plant Materials Centers	3.9	4.5	5.0	5.0
Resource Inventories and analysis	15.8	14.2	7.3	--
Great Plains Conservation program	20.5	12.5	2.8	--
Watershed planning and construction	305.2	129.0	73.9	--
Total	674.3	521.1	476.3	392.3
Agricultural Stabilization and Conservation Service:				
Agricultural Conservation program	180.7	12.6	--	--
Other Cost Sharing programs.....	25.5	15.9	--	--
Total	206.2	28.5	--	--
Conservation Reserve	23.0	700.0	1,388.0	2,008.0
Total, SCS & ASCS Conservation	$903.5	$1,249.6	$1,864.3	$2,400.3

The 1987 Current Estimate assumes Congressional approval of the following rescissions which would eliminate all financial assistance available through these programs beginning in January 1987:

Great Plains Conservation Program, $8.0 million;
Watershed and Flood Prevention Operations, $96.0 million;
Resource Conservation and Development, $5.0 million;
Agricultural Conservation Program, $164.4 million;
Water Bank Program, $8.2 million;
Rural Clean Water Program, $6.0 million; and
Emergency Conservation Program, $10 million.

OPENING REMARKS OF RICHARD GOLDBERG

Senator BURDICK. I am pleased to announce that two members of the panel received some influence and training from the country from which I came, the state of North Dakota. One comes from the west, Mr. Hertz, and one comes from the east, Mr. Goldberg.

Do either one of you gentlemen have anything to contribute at this time?

Mr. GOLDBERG. Mr. Chairman, it is my pleasure to appear here today to speak before the committee, and I am pleased to have the opportunity to help in carrying out the conservation reserve program.

You and Assistant Secretary Dunlop have already mentioned this program. We are in the midst of a fourth signup, and we are happy to report that all indications are that it is going to be a very highly successful program. It will go a long way toward contributing to the long-term conservation of our nation's natural resources.

During 1988, the Commodity Credit Corporation will continue its current role in providing services and facilities to carry out the conservation reserve program. However, the Food Security Act, beginning in 1988, requires an appropriation for the program in advance. This is a change from 1986 and 1987 when CCC funds could be used for this particular purpose. Accordingly, we are requesting for fiscal year 1988 a separate appropriation of just under $1.4 billion for CRP payments. This money will provide for the cover costs for the newly enrolled acres, rental payments on previously enrolled acres, and related technical assistance activities.

Mr. Chairman, Secretary Lyng has described for the committee the administration's commitment to meeting the Gramm-Rudman-Hollings deficit target of $108 billion in fiscal year 1988. In the course of developing the 1988 budget proposals, we have examined each of the Department's programs carefully in light of this deficit reduction objective and had to make some difficult choices.

As a result of these considerations, we are requesting no funding for the agricultural conservation program and other conservation cost-share programs in fiscal year 1988. Rescissions of fiscal year 1987 funding for several of these programs are also proposed.

In conclusion, Mr. Chairman, we are confident our fiscal year 1988 budget proposals for the conservation programs are consistent with the priority that Congress has established for the conservation reserve program. They reflect the encouraging progress which has been achieved with the CRP to date and are budgetarily sound. That concludes my remarks, Mr. Chairman.

I don't know if the chairman would want to move back to the Soil Conservation side or move forward with ASCS. We are prepared to do either one.

Senator BURDICK. Do we now hear from western North Dakota, Mr. Hertz?

STATEMENT OF MILTON HERTZ

Mr. HERTZ. If you wish. Mr. Chairman, I, too, would like to say thank you for the opportunity to appear before you and the committee and present our budget request for fiscal year 1988.

Much of the ASCS conservation activity for 1988 will be carried out under the conservation reserve program which was mandated by the Food Security Act of 1985. As of this time, we have a total of approximately 9 million acres enrolled in the program. Two million acres of that were signed for the 1986 crop and the balance for 1987. Included in this are approximately 5.5 million acres of commodity base, which give us an offset in the cost of the program through savings in commodity program payments.

Our objective through the 1987 crop-year signup is to bring the cumulative enrollment to 15 million acres as required by the law. If the activity that we are seeing out in our county offices and the questions that we are receiving here are any indication, that goal will be very easily met. I will suggest at this time it will be exceeded by a considerable number of acres.

As Mr. Goldberg mentioned, the law provided for the first 2 years of the program to be funded by the Commodity Credit Corporation. During fiscal year 1986, CCC funded cost-share payments for vegetative cover and technical assistance services as we shared in implementing this program with other agencies—namely, the Soil Conservation Service and the Forest Service.

In fiscal year 1987, CCC will fund these activities, plus the announced corn acreage bonus and the first-year rental payments on the 1986 crop reserve acres. These rental payments total approximately $86 million and are being paid with commodity certificates.

Beginning in fiscal year 1988, however, an appropriation for CRP must, by law, be provided to the CCC in advance. Therefore, we are requesting a separate, no-year appropriation for the CRP to cover estimated cash outlays due and payable in fiscal year 1988. The amount of this request is approximately $1.4 billion, which includes approximately $700 million for cover costs on the 10 to 13 million newly enrolled acres, approximately $700 million for rental payments, and $21 million for technical assistance.

In addition, an estimated $98 million in CCC commodity certificates will be used for rental payments. We propose that reimbursement for these certificates be provided through existing procedures for reimbursing CCC losses. Limited use of these certificates provides needed flexibility in meeting the financing requirements and avoiding supplemental requests.

I think one would have to agree that in view of the open-endedness of the signups we are not able to predict exactly the number of acres that will be offered in the conservation reserve or exactly what our costs will be, and therefore this flexibility is much needed.

As Mr. Goldberg mentioned, our 1988 budget proposes zero funding for the ACP, forestry incentives, water bank, emergency conservation, and Colorado River Basin salinity control programs. While we recognize the value of these programs, we are aware of the difficult choices that must be made in order to reduce the federal deficit. For the same reason, rescission of fiscal year 1987 appropriations is proposed for some of these programs.

However, from remaining fiscal year 1987 funds, the ACP will save 3 million tons of soil and conserve 58,000 acre-feet of water. The salinity program will provide $1.8 million for prompt implementation of the Grand Valley project and $1.8 million for the Uinta Basin project, and the forestry incentives program will help plant trees on approximately 170,000 acres.

PREPARED STATEMENT

Mr. Chairman, this concludes my statement, and I would be happy to respond to any questions.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF MILTON HERTZ

Mr. Chairman and Members of the Subcommittee, I want to thank you for this opportunity to discuss the fiscal year 1988 budget request for the Agricultural Stabilization and Conservation Service and to answer your questions. I wish to discuss today our request for conservation programs since the budget proposals for the Commodity Credit Corporation and the ASCS Salaries and Expenses Account are scheduled for a separate hearing next month.

Conservation Reserve

Much of the ASCS conservation activity for 1988 is proposed to be carried out under the Conservation Reserve Program, mandated by the Food Security Act of 1985. The program has gotten well under way since the first signup a year ago. Farmers have had a chance to analyze the advantages it offers and have begun to demonstrate their support through participation. As the result of the three signups held during FY 1986, a total of 8.5 million acres on 66,743 farms has been enrolled in the program -- approximately 2 million acres for the 1986 crop and 6.5 million acres for the 1987 crop -- with a reduction in commodity base acreage of approximately 5.5 million acres. The 1985 legislation calls for the voluntary, gradual enrollment of 40 million to 45 million acres of highly erodible land, making it the largest conservation program in this country's history.

During FY 1987 at least two signups will be held. The first is in progress and ends February 27, and the second will be held next summer. We anticipate that farmers will enter at least 6.5 million additional acres into the reserve for the 1987 crop, to bring cumulative enrollment to the 15-million-acre level required for the year by the Food Security Act. In addition, acreage may be enrolled during 1987 for the 1988 crop.

During the February signup, a one-time "bonus" rental payment is being offered to farmers as an incentive to enter corn base acreage into the reserve for the 1987 crop. For the first year, farmers will receive $2.00 times the farm program payment yield for corn, times the number of acres of corn base enrolled in the reserve. This bonus will be paid in the form of CCC commodity certificates when a 1987 contract is accepted. After the first year of the contract, the farmer will receive the regular annual rental payment only.

The Food Security Act provides that for the first two years of the program, fiscal years 1986 and 1987, CRP payments will be funded by the Commodity Credit Corporation. During FY 1986, CCC funded cost-share payments for vegetative cover and technical assistance services of other agencies. In FY 1987, in addition to current cost-share payments, technical assistance, and the corn acreage bonus, the first year's rental payment on 1986-crop acres accepted into the reserve is due. These 1986-crop rental payments are about $86 million and are being paid entirely in the form of CCC commodity certificates.

Beginning in FY 1988, the services and facilities of the Corporation will continue to be used to carry out the program, but an appropriation for CRP payments must, by law, be provided to CCC in advance. Therefore, in accordance with the law, we are requesting a separate, no-year appropriation for the CRP to cover estimated cash outlays due and payable in FY 1988. Our appropriation request is $1.388 billion, of which $689 million is for cover costs on an estimated 10 million to 13 million newly enrolled acres, $678 million is for rental payments on previous years' acreage, and $21 million is for technical assistance. In addition, an estimated $98 million in CCC commodity certificates will be used to pay the balance of the rental payments coming due in 1988. Any use of commodity certificates is a realized loss of the Corporation and is proposed to be reimbursed through the existing procedures for reimbursing CCC losses. Since budget estimates for the CRP must be prepared in advance of actual signup and bid acceptance, limited use of CCC commodity certificates provides needed flexibility in meeting financing requirements and avoiding supplemental requests.

Other Conservation Programs

Our FY 1988 budget proposes zero funding for the Agricultural Conservation Program, Forestry Incentives Program, Water Bank Program, Emergency Conservation Program, and Colorado River Basin Salinity Control Program. While we certainly recognize the valuable contributions these programs have made in the past, we are also aware that difficult choices must be made if the Federal deficit is to be reduced. To contribute toward that goal for 1987, rescission of FY 1987 appropriations has been proposed for ACP, Water Bank, ECP, and Rural Clean Water. The need to meet the Gramm-Rudman-Hollings target for 1988 increases the pressure for such reductions. As you know, the relatively small part of the Federal budget defined as "controllable," including programs such as the ACP, is exposed to a disproportionate share of the needed reductions.

However, from remaining funds appropriated in 1987, the Agricultural Conservation Program will assist in installing a variety of practices on 641,000 acres and will save 3 million tons of soil and conserve 58,000 acre-feet of water. A new special practice, Restoration of Vegetative Cover Damaged by Drought, has been approved for use in the Southeastern States hard hit by drought in 1986. Allocations totaling $3.5 million have been issued to 12 States for this purpose. In addition, existing ACP contracts will continue to be honored until they are completed.

Interim regulations for the new Colorado River Basin Salinity Control Program are nearing completion, with publication targeted for March, at which time program allocations will be issued. In the meantime, the technical assistance agreement with SCS has been signed, and plans have been reviewed to permit prompt implementation once regulations are in place. Members of the USDA Salinity Control Coordinating Committee are in frequent contact to facilitate smooth program operations. Of the

$3.8 million available in 1987, $1.814 million will be used for the Grand Valley, Colorado, project and $1.840 million will be for the Uinta Basin, Utah, project.

The $11.9 million available for the Forestry Incentives Program in FY 1987 will be used to assist numerous Southeastern producers with reforestation of timberstands destroyed by drought in 1986. Overall, funds will be used to improve timberstand on approximately 39,300 acres and to plant trees on approximately 169,100 acres.

Dairy Indemnity Program

Funds for the Dairy Indemnity Program appropriated in FY 1986 and 1987 will probably be sufficient to pay claims of dairy farmers and manufacturers for losses due to heptachlor contamination in Arkansas, Missouri, Nebraska, and Oklahoma; however, it is taking longer than expected for some herds to become contamination-free.

This concludes my prepared remarks. I will be happy to answer any questions.

STATEMENT OF WILSON SCALING

Senator BURDICK. Mr. Scaling.

Mr. SCALING. Yes, sir; it is a pleasure for me to testify before you because I come from the land and I am grateful to be involved in putting into place the most important conservation legislation that has been enacted in the recent 30 to 50 years.

As Mr. Dunlop pointed out awhile ago, the Soil Conservation Service will be making this its most important work over the next few years.

We in the Soil Conservation Service certainly do not take this responsibility lightly. The success of this effort is going to require the highest degree of professionalism on our part. It will also depend greatly upon the continued cooperation and support from the conservation districts and private landowners who are integral parts of our conservation partnership, which has worked so effectively over the past few years.

We anticipate that around 1 million conservation plans must be developed between now and 1990. That is about an average of two conservation plans developed each week in every SCS field office during the next 3 years.

I would also like to stress that our ability to handle this work depends upon farmers and ranchers requesting our assistance right away so that the workload can be spread out more evenly. If the majority wait until the last minute, it is going to be almost impossible to get this job done.

Our information effort is geared toward preventing that from happening. We are continually looking at ways to increase our efficiency and to streamline procedures so that we can use our existing work force as effectively as possible.

As Mr. Dunlop pointed out, some sacrifices will be required during this time, but I honestly feel like we can put some work on the back burner or let it maintain while we go ahead and develop these plans. We are committed, however, to doing our part to make sure that no farmer or rancher is shut out of USDA programs because he doesn't have a conservation plan.

PREPARED STATEMENT

That is all I have to say at this time. I do have a prepared statement that will go in the record, sir. Thank you.

Senator BURDICK. Thank you.

[The statement follows:]

STATEMENT OF WILSON SCALING

Mr. Chairman and members of the Committee, it is a privilege to be here today to discuss the 1988 budget proposals for the Soil Conservation Service. I appreciate the support this committee has consistently shown for soil and water conservation. This is a historic time for all who are involved in the conservation effort at all levels of government. Public awareness of the importance of preserving our soil and water resources is at a high point. State and local conservation programs continue to show strong growth and are playing an ever increasing role in the overall conservation effort. At the Federal level, we are putting into place some of the most significant conservation legislation to be enacted in recent years. The Conservation Reserve, Conservation Compliance, Sodbuster and Swampbuster provisions will all yield substantial conservation benefits. Because of these factors, I believe that there is a tremendous potential for us to see real progress in conserving the Nation's soil and water resources--which, is the real wealth of this country along with its people.

FY 1988 BUDGET REQUEST

I would like to summarize briefly the key proposals contained in the fiscal year 1988 budget request for the Soil Conservation Service. The budget requests a total of $476.3 million for SCS programs, a decrease of $132.4 million below the enacted 1987 funding level. This funding level would permit us to maintain current operating levels for our four highest priority programs, our technical assistance, soil surveys, snow surveys and operation of our plant materials centers. Funding for these programs in 1988 would increase $39.2 million above the 1987 enacted level. Most of this increase, about $28.4 million, is for mandatory cost increases including the January, 1987, 3 percent pay increase and the cost of the new Federal Employees Retirement System. Agencies are required to fund the entire employer share of the cost of this new system from their own appropriations, a change from the old system which was funded partially through agency budgets and supplemented with a direct appropriation to the retirement fund. Although this shift in funding for retirement costs would not increase the total

Federal budget, it does represent a very significant increase in costs that will have to come out of our pocket for those employees hired after December 31, 1983, and for other employees who choose to switch into the new system. Our costs for employees under the new system are projected to run about 24 percent of salary as compared to 7 percent under the old system. In addition to these personnel-related costs, the budget also includes $3.1 million to cover increased operating costs for non-salary support items needed to maintain the buying power of these four vital programs.

BUDGET PROPOSALS FOR FOOD SECURITY ACT WORKLOAD

A program increase of $7.7 million is requested to offset some of the costs of implementing the Conservation Title of the 1987 Food Security Act. Mr. Dunlop has already mentioned the tremendous challenge and responsibility we are facing as we assist producers seeking to meet the requirements of the law. We do not take this responsibility lightly. The success of this effort will depend upon the level of cooperation we can achieve between SCS employees, local soil and water conservation districts, and the private landowner. We will exercise the highest degree of professionalism and integrity as we make the necessary technical determinations and help in the preparation and implementation of conservation plans. We do not want to see a single farmer or rancher shut out of USDA programs because he doesn't have a conservation plan.

Our Food Security Act workload projections indicate that, on a National basis, it is going to take our entire field office staff to carry out this work during the peak workload years of 1988 and 1989. That assumes, of course, that landowners begin to request our assistance right away, well before the January 1990 deadline for the conservation compliance requirements. About one million conservation plans will need to be developed between now and 1990. That equates to an average of two new conservation plans developed each week in every SCS field office during the next three years. Of course, there is no average district so the actual workload will be much higher in some areas of the country. A budget increase of $1.7 million is requested under our technical assistance activity to help finance travel costs so we can detail employees into high workload areas as needed. We will also be looking at ways to increase our efficiency and to streamline procedures so that we can use our existing workforce as effectively as possible. I should also mention that because of the flexibility this committee provided to shift funds within our Conservation Operations account, we have allocated an additional $1.9 million for technical assistance to service the Farm Bill workload in FY 1987. This is giving us a much needed head start in getting on with this work.

Even so, there will not be much, if any, SCS staff time available for other work during this period. We will be looking to local districts and State agencies to help carry the ball on some of this work at least temporarily until we get past the peak Food Security Act workload period. We realize that this will pose a hardship in some areas while work on the less seriously eroding cropland, on rangeland and other agricultural and urban lands is given a lower priority. Clearly, however, significant soil savings will be achieved on that portion of cropland that produces most of the country's excessive erosion.

A budget increase of $6.1 million is requested to permit us to accelerate soils mapping in areas impacted by the Food Security Act and where adequate soils data are not available to make highly erodible land and wetland determinations. Soils data are basic to all the conservation planning and application work that we do. Although we have completed soils maps on about 82 percent of the country's nonfederal lands, there are still about 81 million acres of cropland or potential cropland and wetlands that are impacted by the Food Security Act requirements and that do not have adequate soils maps. The increase requested in the budget will enable us to accelerate the current rate of mapping by about 10 percent or 3 or 4 million acres more a year. We believe that this will permit us to provide the soils data needed to support the Farm Bill work and to meet the January 1990 deadline.

PROPOSED PROGRAM ELIMINATIONS

The remaining $84 million included in the FY 1988 budget request is for the costs associated with closing out all of the remaining programs currently provided by the Soil Conservation Service. This includes River Basin Surveys, Watershed Planning, Watershed and Flood Prevention Operations, the Great Plains Conservation Program, the Resource Conservation and Development Program, and our inventory and monitoring and resource appraisal activities. About 3,200 employees would be dismissed during FY 1988 as program operations are terminated. The funds requested would be used to cover severance pay and lump sum payments for these employees, and for other administrative costs to close down program operations in an orderly manner. Consistent with the 1988 proposals to eliminate these programs, the budget includes proposals to rescind a total of $109 million in 1987 cost sharing and financial assistance funds under the Watersheds, Resource Conservation and Development, and Great Plains Conservation programs. No new contracts have been signed under these programs since January 5, 1987. These proposals reflect the need to reduce Federal spending in order to meet the deficit reduction targets set forth in the "Gramm-Rudman" law.

I would like to provide for the record tables showing a summary of the SCS budget and of funds appropriated by state and local governments for soil conservation programs for fiscal year 1987.

That concludes my prepared statement, Mr. Chairman. With the help of my staff, I will be happy to answer your questions.

SOIL CONSERVATION SERVICE
FY 1988 Budget
(In thousands of dollars)

	FY 1986	FY 1987		FY 1988		
	Actual	Enacted	Proposed**	Phase Down Costs	Continuing Program	Total Request
CONSERVATION OPERATIONS:						
1. Technical Assistance........................	$270,859	$287,591	$297,760	--	$314,239	$314,239
2. Inventory & Monitoring......................	11,696	11,383	11,688	$5,124	--	5,124
3. Soil Surveys................................	54,338	56,289	58,156	--	67,717	67,717
4. Snow Surveys & Water Forecasting............	3,780	4,870	4,976	--	5,379	5,379
5. Operation of Plant Materials Centers........	3,890	4,408	4,553	--	4,971	4,971
6. Resource Appraisal & Program Development...	4,105	2,502	2,538	2,166	--	2,166
Total, Conservation Operations.................	348,569	367,043	379,671	7,290	392,306	399,596
RIVER BASIN SURVEYS AND INVESTIGATIONS:						
1. USDA Cooperative Studies....................	10,265	8,352	8,563	5,871	--	5,871
2. Flood Plain Management Assistance...........	2,085	1,812	1,858	1,274	--	1,274
3. Interagency Coordination & Program Formul..	1,830	1,655	1,718	1,163	--	1,163
Total, River Basin Surveys and Investigations.	14,180	11,819	12,139	8,308	--	8,308
WATERSHED PLANNING AUTHORIZED BY PL-566.......	8,487	8,480	8,713	5,520	--	5,520
WATERSHED AND FLOOD PREVENTION OPERATIONS:						
1. Watershed Operations Authorized by PL-534:						
a. Technical Assistance....................	14,649	14,954	14,954	6,825	--	6,825
b. Financial Assistance for construction...	19,065	11,237	2,237	550	--	550
c. Loan Services...........................	167	80	80	--	--	--
Subtotal, Flood Prevention..................	33,881	26,271	17,271	7,375	--	7,375
2. Emergency Watershed Protection Operations..	79,732	14,755	--	985	--	985
3. Small Watersheds authorized by PL-566:						
a. Technical Assistance....................	62,700	56,900	56,900	38,014	--	38,014
b. Financial Assistance for construction...	80,826	77,784	13,784	3,650	--	3,650
c. Loan Services...........................	333	175	175	--	--	--
Subtotal, Watershed Operations.............	143,859	134,859	70,859	41,664	--	41,664
Total, Watershed & Flood Prevention Operations	257,472	175,885	88,130	50,024	--	50,024
GREAT PLAINS CONSERVATION PROGRAM:						
1. Cost-sharing assistance.....................	11,540	10,648	2,648	--	--	--
2. Cost-share programming and contract admin..	2,861	3,144	3,144	906	--	906
3. Technical Assistance........................	6,081	6,682	6,682	1,925	--	1,925
Total, Great Plains Conservation Program......	20,482	20,474	12,474	2,831	--	2,831
RESOURCE CONSERVATION AND DEVELOPMENT:						
1. Technical Assistance........................	17,265	17,743	17,743	9,902	--	9,902
2. Financial Assistance........................	7,658	7,202	2,202	100	--	100
3. Loan Services...............................	114	75	75	--	--	--
Total, Resource Conservation and Development..	25,037	25,020	20,020	10,002	--	10,002
Subtotal, SCS Appropriated Funds..............	674,327	608,721	521,147	83,975	392,306	476,281
RURAL ABANDONED MINE PROGRAM..................	(9,019)	(9,400)	(9,400)	(500)	(--)	(500)
TRUST FUNDS...................................	744	560	560	--	560	560
TOTAL, SOIL CONSERVATION SERVICE..............	675,071	609,281	521,707	83,975	392,866	476,841
Ceiling Staff Years...........................	12,895	14,177	13,334	713	9,829	10,542

**Includes impact of rescissions of program funds and transfers related to pay and retirement costs.

FUNDS APPROPRIATED BY STATE AND LOCAL GOVERNMENTS FOR CONSERVATION PROGRAMS
FISCAL YEAR 1987

	STATE GOVERNMENT	LOCAL GOVERNMENT	TOTAL
ALABAMA	$1,050,000	$ 842,000	$1,892,000
ALASKA	152,060	120,300	272,360
ARIZONA	1,431,264	2,104,347	3,535,611
ARKANSAS	2,658,300	3,212,400	5,870,700
CALIFORNIA	3,362,000	2,283,000	5,645,000
COLORADO	598,319	364,796	963,115
CONNECTICUT	761,100	398,400	1,159,500
DELAWARE	5,777,000	636,480	6,413,480
FLORIDA	1,599,300	1,472,900	3,032,200
GEORGIA	1,924,000	2,887,000	4,811,000
HAWAII	4,550,748	659,483	5,210,231
IDAHO	2,354,815	123,000	2,477,815
ILLINOIS	9,635,387	3,250,026	12,885,413
INDIANA	2,350,674	2,587,766	4,938,440
IOWA	10,509,145	1,080,325	11,589,470
KANSAS	3,797,301	770,955	4,568,256
KENTUCKY	5,084,124	1,734,000	6,818,124
LOUISIANA	2,693,500	495,000	3,188,500
MAINE	453,420	269,578	722,998
MARYLAND	13,586,915	8,964,162	22 551,077
MASSACHUSETTS	1,745,500	1,602,000	3,347,500
MICHIGAN	3,429,000	1,275,392	4,704,392
MINNESOTA	31,225,852	29,312,127	60,537,979
MISSISSIPPI	234,264	2,316,616	2,550,880
MISSOURI	11,185,000	685,000	11,870,000
MONTANA	1,063,363	1,023,792	2,087,155
NEBRASKA	4,258,003	41,032,356	45,290,359
NEVADA	19,900	89,792	109,692
NEW HAMPSHIRE	23,480	223,673	247,153
NEW JERSEY	3,002,442	2,338,098	5,340,540
NEW MEXICO	537,126	1,925,012	2,462,138
NEW YORK	3,222,736	3,756,589	6,979,325
NORTH CAROLINA	5,110,000	5,949,000	11,059,000
NORTH DAKOTA	863,521	876,000	1,739,521
OHIO	6,573,900	4,794,000	11,367,900
OKLAHOMA	2,610,235		2,610,235
OREGON	755,852	3,614,708	4,390,560
PENNSYLVANIA	701,000	208,000	909,000
PUERTO RICO	1,398,203	427,455	1,825,658
RHODE ISLAND	139,700	8,900	148,600
SOUTH CAROLINA	2,901,000	1,722,393	4,623,393
SOUTH DAKOTA	318,440	768,477	1,086,917
TENNESSEE	1,347,266	922,880	2,270,146
TEXAS	3,454,805	4,328,361	7,783,166
UTAH	1,614,710	204,191	1,818,901
VERMONT	395,300	3,570	398,870
VIRGINIA	3,478,340	1,688,600	5,166,940
WASHINGTON	2,009,526	1,352,965	3,362,491
WEST VIRGINIA	1,122,225	927,825	2,050,050
WISCONSIN	6,258,300	4,990,372	11,248,672
WYOMING	241,600	250,750	492,350
TOTAL	$175,549,961	$152,874,812	$328,424,773

FINAL SWAMPBUSTER AND SODBUSTER RULES

Senator BURDICK. I might say to the committee members that I am going to limit myself to the 5-minute rule until the next round so that we all get a chance.

Mr. Scaling, I understand that the final regulations for the swampbuster and sodbuster provisions of the 1985 farm bill are still not out. Earlier this week when the Secretary was here before the committee testifying, his deputy indicated that these regulations are almost out and that the farmers should rely on the preliminary regulations that went out earlier.

What is the situation?

Mr. SCALING. As of right now, sir, we are operating under interim rules. I don't see any problem with operating that way until we can get the final rules out. I feel it is very important, before we have a final rule, that we have heard from the entire country, from the Atlantic to the Pacific. Because there are a lot of major impacts in this law, I feel we don't need to rush into this at all. Let's be sure of what we have before we finalize anything.

Senator BURDICK. What are we going to do in case a farmer signs up thinking he was in compliance based on the preliminary regulations and then he is found not to be in compliance based on the final regulations? What do we do about that?

Mr. SCALING. We are going to have to work on that, and let him know up front that he faces a possibility of that happening. But for right now we have just got to operate under these interim rules and our best assessment as to what is there right now.

Senator BURDICK. You mean to say we are going to tell the farmer, "You have got to take the chance," when he signs up?

Mr. HERTZ. Mr. Chairman, maybe I could respond to that, since the regulations are being put out by my agency. Initially, when we put the interim rule together, we looked at everything in terms of the strongest way that we could implement the law.

As we received comments and as we continued to assess the impact of these conservation provisions in the countryside, we found that we are not really ready to put that final rule into place because we still have some judgments to make that are going to create an economic impact out in the countryside, and we still have some work to do.

My suspicion is that if the rules change, it will not be to require a tighter restriction for conservation compliance—the change will be to make it more tenable; that it will be more acceptable and more fair to implement out in the country, sir.

Senator BURDICK. I understand that. I also understand that this is 1987. It is the 1985 Farm Act. What has been the delay in getting these regulations out?

Mr. HERTZ. Mr. Chairman, I believe that the impact of this legislation is greater than any other piece of agricultural legislation that has been passed. We feel that we should spend every extra moment that we can with these regulations so that we can do them right. When we come up with that final rule, we want to have something that will work out in the country. We do have the interim rule under which the law is being implemented.

Senator BURDICK. What should I tell the farmer? He comes into my office and he says, "Well, I have seen these temporary regulations, and you say they're not final." What should I tell him, "Sign up and take a chance?"

Mr. HERTZ. He will have to operate under the interim rule, yes.

Senator BURDICK. And the interim rule may be substantially different than the final rule; is that possible?

Mr. HERTZ. I think maybe we could tie compliance to a crop year. If a farmer starts his crop year under the interim rule, he would operate that way all year and look to possible changes in the regulations that may affect the next crop year.

Senator BURDICK. Don't you think we would get a better signup if we had these in place totally, finally?

Mr. HERTZ. Well, I don't know that there is a lot of relationship between the signup in the conservation reserve and the regulations of the sodbuster/swampbuster. The regulations for the conservation reserve program are in final form.

IMPACT OF FINAL PROGRAM RULES CHANGE

Mr. DUNLOP. Mr. Chairman, I wonder if I might address the points that you are making in your question.

Senator BURDICK. You may.

Mr. DUNLOP. The way I understood you to ask the question is that if we have a farmer that complies with the regulations that are now in force, are we going to come along, possibly, with final rules and change the name of the game in the middle of this crop year? I think that we can say categorically, "No."

Now, if the rules do change and then the next crop year comes along, then he might, in that future crop year, expect to see some changes. But we wouldn't be in a position, from my understanding, where we change the rules in the middle of the game once he has already planted his crop and made his investments. That is often the concern that farmers have.

The second point I think we might make about this is that the distinctions between the interim rule and the final rule are probably going to be very minor. If one complies with the interim rule, there is a very strong likelihood that most people involved are also going to be in compliance with the final rule.

Senator HARKIN. Mr. Chairman?

Senator BURDICK. Just one more question. Now, you indicate that somebody who signed up is not going to be penalized in any way. Let's turn it around. Suppose the final rules are very beneficial to the farmers? Which set of rules do you like?

Mr. DUNLOP. My understanding would be that if he comes in under an interim rule in 1987 and he begins to farm then, it is all a question of whether he uses that soil or not.

You know, dates pass. He has either used it, or he hasn't. So if he has used it under the rule, then that would change. If it turns out the rule is more generous, as you indicated, and he could have used it, well then, of course, it is too late to plant; that chance has just passed.

Senator BURDICK. Does the Senator from Iowa have a question?

Senator HARKIN. I just wanted you to yield on that point, Mr. Chairman, if you would. Assuming the rules will not be changed in the middle of the game, but you might tell that to those farmers who signed up to put their land in the conservation reserve this year in good faith and then all of a sudden they find out now that if they had just waited awhile, if they had just procrastinated, they would have made a lot more money, like $2 a bushel.

Tell that to those farmers out there that in good faith signed up to put that land aside and now find out that someone later on is getting a better deal out of it. Tell them that the rules aren't being changed in the middle of the game. They don't believe it, George. They just don't believe it any more. They change all the time. I am going to have more to say about this. I am sure my colleagues might.

ELIMINATION OF COST-SHARE PROGRAMS

Senator BURDICK. Gentlemen, I have a real strong concern that the elimination of the conservation cost-share programs under both ASCS and SCS are going to leave a huge gap in our conservation efforts.

Secretary Lyng earlier told me that he expected the conservation reserve program to pick up the slack. I know that that is your position also.

Let me ask you this question: Can you guarantee this committee that every acre that would benefit from the continuance of the cost-share programs is now going to be entered into the conservation reserve?

Mr. HERTZ. No, sir; I don't believe we could guarantee that.

Senator BURDICK. What is the farmer going to do?

Mr. HERTZ. One of the significant things that is happening across the country is that there is a lot of state and local cost-sharing for conservation practices, and in many states, farmers have turned to using those funds. Up to this time we supplemented the funds through our cost-sharing programs. The state and local funds will continue in place.

IMPACT OF PROPOSED RESCISSIONS

Senator BURDICK. Turning to another phase here, I would like to know what the result of the proposed rescissions is across the country. I understand that you are holding up the funding for these various programs, and therefore, no work is being done. Is this correct? Are you marking time now?

Mr. HERTZ. Right now, for the ACP, there are approximately $164 million pending rescission. However, as far as activities going on in the country, the states had a carryover totaling approximately $77 million at the end of fiscal year 1986, and approximately $15 million in new money was allocated to the states in the beginning of fiscal year 1987. So we have approximately $92 million out there at work.

Senator BURDICK. Some people in North Dakota have been telling me that they cannot get any renewals on their water bank contracts, for example. How long do you expect this money to be held up?

Mr. HERTZ. The water bank contracts that were signed as long-term contracts will continue to be funded. The funds that would be impacted by a rescission would be for new contracts and, as you point out, renewals of expiring contracts.

Senator BURDICK. I will yield to the Senator from Iowa at this point.

CRP BONUS

Senator GRASSLEY. Mr. Chairman, you may get tired of hearing questions I ask because I am going to ask the same questions I asked on Monday, and I am going to start right where Senator Harkin just left off with his comment. That is in regard to this $2 bonus.

What has intervened here, maybe, in the last 2 or 3 days? I have had an opportunity on two occasions, Monday in a meeting similar to this, and then this morning in another meeting, to question Secretary Lyng about it, and he said that he would give it another look and seemed to be understanding some unfairness of it.

So I surely want to urge you in the process of helping him to look at the unfairness of the situation in which, as Senator Harkin says, farmers signed up last fall for the 10-year conservation reserve, no bonus; you announce the bonus today.

But even beyond the unfairness of it, I think there is an economic situation here that you need to be aware of, and that is, I think that the farmers that signed up last year were probably the farmers that had less economic leeway, probably greater cash flow problems, and were probably told by the banker, "You know, you ought to get in on this."

The farmers who waited were probably the ones that had more options, and the farmers signing up today probably are in a little better economic position than those who signed up last year. The ones who signed up last year are really probably, from the standpoint of the economics of it, the ones who need that $2 bonus proportion.

So, I guess I wouldn't expect you to have an answer for me in the few hours that have intervened from my last conversation with Secretary Lyng and now, but I hope that you would. Unless you have something to add to it, I am not really asking a question. I am asking you to look into it, help the process along, and remember, this is the last week of this signup. We really need to get this taken care of and get it changed for the benefit of the farmers that didn't get the bonus, and I think, as a matter of fairness, more importantly, as an issue of credibility, we ought to give that.

Would there be any update, for instance, that any of the people from ASCS could give us?

Mr. HERTZ. Senator Grassley, I have not had a chance to visit with the Secretary based on this request, but it certainly has been brought to our attention. Maybe I could clarify one point, and I will direct my remarks to Senator Harkin.

The regulations that govern the conservation reserve program are in final form; they are all set. The regulations that govern the sodbuster-swampbuster are the ones that are in the interim form. I only make this point because when we reference the bonus that is paid on the corn acres, that decision was made using the authority that the Secretary has to pay a bonus. The background of that reasoning was that of the 5.5 million acres of base that are in the conservation reserve at this point in time, only about 3 percent is corn base.

It seemed appropriate to use a bonus to get some of the highly erodible land and some of the most productive areas into the conservation reserve. We felt this incentive was required in order to have that happen.

Senator GRASSLEY. I don't think we argue with the incentive. In fact, considering the 35-percent set-aside that is possible and that retarding the effort that maybe would normally come from people that put the land in, I think it is a good thing.

Additionally, then, I guess if it is a good thing for this spring, it should be a good thing for people who signed up last fall to have and who didn't know about it at the time.

My second point is also something that I brought out previously, but now that there are soil conservation administrators within the Department here, I think it is very important that you think of this ability of farmers who can't plant oats this spring because they forgot to certify.

I am not talking about people who didn't raise oats in the past. I am talking about people who have raised oats but, because we had two different certification dates last summer, one for corn and one for oats, just overlooked the oats certification.

They would like to plant oats this year; they can't. OK, that land isn't going to sit idle. It can't be put into corn because they are going to be at their maximum corn. They are either going to plant, as I see it in Iowa, either oats or soybeans. Soybeans are in surplus. Oats are not going to be in surplus. Soybeans do not lend very well to soil conservation. Oats and other cover crops very definitely do.

So we have also brought to the Secretary's attention, again, and we have been trying to over a long period of time, a reconsideration of this position and not finding it a compromise in any way of the cross-compliance requirements. Because we are talking about people who could prove that they had raised oats, but administratively, just forgot to certify. I agree with the general thrust of cross compliance.

But also, now, to you people who are here and in considering the Secretary, again this morning, willing to reconsider the Department's position on this, that you would think of it from a soil conservation point of view and get that point home to the Secretary's Office. Again, this is a decision that maybe you might have another week or two to make for most of the Midwest, unlike the other one that has got to be made this week.

But I wish you would consider that, because I just think it makes good, common sense. If you want to comment, OK.

Mr. GOLDBERG. Senator, if I might comment for just a moment, others and myself met with a portion of the Iowa delegation a couple of days ago on the subject of oats, which was a problem in a number of states. It does have to do with cross compliance, as you very well pointed out. For those farmers, particularly in Iowa, where most of the oats that are grown are nonreported, nonbase oats and are used on the farm for feed purposes, generally speaking, under cross compliance, farmers will not be able to grow those oats under current restrictions and, in all likelihood, could put in soybeans.

Suffice it to say that is a brief restatement of what you have already said. The only thing that I wanted to tell you is that our office and the Secretary's office currently have that whole program under observation.

Senator HARKIN. What did he say? What was that last sentence, you and the Secretary's office have what?

Mr. GOLDBERG. We are still looking at the problem.

Senator GRASSLEY. I hope you mean by looking at the problem, you are reconsidering your position, right?

Mr. GOLDBERG. Well, we are looking at the numbers and the figures that are involved.

Senator GRASSLEY. That are necessary to reconsider.

Mr. GOLDBERG. That is right.

Senator GRASSLEY. But the Secretary did tell us this morning that he would reconsider it.

Mr. GOLDBERG. That is right.

Senator GRASSLEY. He didn't give any indication of changing, but a reconsideration is, at least at the Secretary's level, something new, and good news, as far as I am concerned.

Mr. GOLDBERG. Oh, yes; my point, Senator, is we are in the process of preparing the analysis for him so that he can make the final decision.

Senator GRASSLEY. Going back to the other point that I made about the bonus, do any of you have a cost figure, if you go back to those who signed up and gave the bonus? Do you have a cost figure for that?

Mr. HERTZ. Do you mean the corn base that is already in the conservation reserve for 1987?

Senator GRASSLEY. Yes; corn farmers who signed up for the 1987 10-year conservation program that didn't get the bonus. If they were to get the bonus, what would that cost?

We have a gentleman close to an answer there. When they get one of those little machines, I expect we can get an answer.

Mr. HERTZ. This is a ballpark guess. Somewhere between $40 and $50 million.

Senator GRASSLEY. OK. It seems to me, particularly if these are farmers, as I indicated—and some of that information comes from ASCS people in my state—who maybe had less economic options last fall than those signing up this spring, I think that that is worthy to consider as a matter of fairness.

Just one last statement, not a question, but I would share the chairman's concern about doing away with the ACP cost-share. I hope it is a situation where, because of the politics of this thing, it was an easy thing for USDA to throw out because you know Congress is going to put it back in. If you really believe that it ought to be eliminated, I guess there are real differences between us, but I don't believe that. If you could express your personal opinion in that you think it is good to do away with those programs, please?

That is all.

Senator BURDICK. Senator Kasten?

USDA OUTREACH EFFORTS ON FARM BILL PROGRAMS

Senator KASTEN. Mr. Chairman, thank you.

I wanted to talk a little bit about the soil conservation program. Mr. Scaling, you touched on this in the beginning of your testimony, but I wanted to go back and ask you about implementation of the conservation title of the farm bill.

It seems to me that whether the conservation compliance, the sodbuster and also the swampbuster provisions of this title are going to work is going to depend on how well all of us are able to educate farmers about what is required of them, as well as vigorous enforcement on your side.

It seems also to me that that education process, we ought to assume, is going to take a longer and not a shorter period of time. There is a lot going on out there. I really appreciated your opening comments when you said you felt that we're in a wonderful position to make a real difference with the soil conservation programs.

We just got lucky. The agricultural community, the environmental community, everybody came together and just all of a sudden, people that had been battling each other said, "We are all going to go one way," and we jumped on it; we got it into law; and now you have got the opportunity to see that that law becomes what we all hoped it would be.

The conservation compliance provisions of title XII of the Food Security Act require all farmers receiving farm program benefits to have an SCS-approved conservation plan by 1990. Then that plan, as I understand it, must be implemented by 1995.

I wonder if you could outline for us the steps that you are taking in order to ensure the farmers know about the need to develop a conservation plan, now and in the next 6 months. What I would like for you to do is to answer my question here and then submit a more detailed plan in writing to the committee. Frankly, what I would like you to do is to review that and then to go back and forth with you as you reach your dates. I know that the committee will be interested in working on this, also.

But I want to understand how we are going to get from where we are now to 1990 with particular emphasis on not doing everything in 1989, when there will be lots of confusion; when there will be a lot of problems and questions; staff people will be overloaded. We need to start right now.

Could you just give me an outline of the way you think we are going to get from where we are to where we all want to be? If you can be specific in terms of a plan, that would be helpful to me.

Mr. SCALING. First of all, I think 95 percent of the nation's farmers are aware of the compliance section of the farm bill by now.

We propose to educate the nation's farmers in groups, because we don't have time to work individually any more. For example, in major resource areas that comprise several states, we would have four or five proposed conservation plans based on the particular soil series. We let a person decide which plan he would like to use, and then we help him with the implementation of it.

There is a lot of concern throughout the United States that we are going to bankrupt a lot of farmers because there is no way they can get to the magic number T.

As I said, I come from the land. I made my living on the land. When I leave here, I am going back to the land. You have to develop a plan; and you have to have a good foundation under it. I want quality plans to start out with. I think as these plans are developed, they have to be put on the ground by our technicians in a reasonable, practical, economically defensible way. If we can reduce erosion in some of these areas from 70 tons, maybe not all the way down to 5 tons, but if we can get to 15 tons, that is a beautiful start. That is a major part of the erosion that has been removed.

In some other areas, if we have erosion at 8 tons, we can go on down to 4 tons. That is good. But not all of this country can make a giant step from 60 tons erosion per acre to 5 tons of erosion per acre in that period of time. It is going to take a little longer period of time to do that than what we have right here.

We are going to get together with environmental groups, and I might add here that we, the people in agriculture, are environmentally oriented ourselves. We know we have to work with mother nature in order to conserve the soil and produce the food and fiber that we produce here in the United States. But we are going to have to work more closely with these farmers in the future than we have ever worked before. Many farmers that are coming to us for plans now have never had a conservation plan, per se, and they have always done whatever they wanted. It has been a farmer program more or less.

But we have got to sit down, and we have got to get this conservation message across. We have got to make sure that we are not bankrupting a lot of people in the private sector. We are using some demonstration projects in some parts of the nation in order to show farmers that conservation does pay.

We have got to conserve this natural resource over the next several hundred years in order that we may continue to be abundantly provided with food and fiber. I can't give you a year-by-year breakdown of how this work is going to go. I just know that we are going to try to develop one-third of the plans now in some parts of the country, one-third of them next year, and in the final year, the last third.

We are off to a great start over much of the United States. The people in the more erosive parts of the country are more interested in this, naturally, than some of the people in the less erosive areas of the country.

In the Palouse area, for example, people are extremely interested in it. A lot of people have already put a lot of plans in effect. West Texas, Mississippi, and Alabama are the same way. So there is already a lot of interest out there.

This has got to be implemented, basically, with common sense, and people are going to have to work together at the local level.

Senator KASTEN. I share the chairman's concern about the fact that we still don't have the final regulations in place on sodbuster-swampbuster. But I know that you do have the conservation compliance parts in. That is a major portion of what we are doing here. My concern, I hope it is yours, also, is that either through ignorance about the program, fear or misunderstanding about the program, or flatout procrastination, we are going to end up with a lot of people in 1989 saying, "OK, quick; hurry up, I want to get in. I've got to get my plan in."

At that point, we could jeopardize the whole concept of conservation compliance. I just don't want to get to that point. I want you to be prepared earlier rather than later and then, if we have some problem cases and other kinds of problems, we can deal with them more easily.

Mr. SCALING. Yes, sir.

MEETING THE FOOD SECURITY ACT OBJECTIVES

Senator KASTEN. There are a few programs we have ended up with, frankly, that ended up being discontinued because they didn't have a chance to get started and to work. This program is too important for it to be swallowed up in the bureaucracy or to not make the farmers aware of the fact that they have got to get an early rather than a late start.

If we agree we are going to work together, and I know that the committee feels the same way, and if you can little-by-little give us more information on it, you can give us information for the record, and we will just monitor this thing with you.

Frankly, there are a couple of us who would like to help you. If it turns out you need some extra people, I know it is hard for you to ask for people after OMB has cut you back, but the fact is that there are ways that this committee might be able to help you on a strong bipartisan basis if you can identify particular areas.

I am not asking you to go against the administration's budget, but this is very, very important to many of us.

Mr. SCALING. It is the most important piece of legislation, as I say, that has happened in 50 years. For the first time, we have conservation of our natural resources tied to the farm programs. That is going to help us tremendously to continue to be an agricultural leader throughout the world.

Senator, I would like to come up and sit down in your office and visit with you one-on-one about our education efforts. We couldn't wait until everything was decided, so we got started on this as soon as the law was passed. Our people are pushing this harder than they have ever pushed anything.

We have some extremely dedicated, professional people in the employ of the Soil Conservation Service. I assure you, sir, it can and will be done.

Mr. DUNLOP. Senator Kasten, I might also say that from the standpoint of the administration's perspective about this as a management problem, we agree with the whole, total thrust of what you have said.

We feel a sense of accountability to this committee and to Congress as a whole about being able to achieve these objectives. We regard it a major management priority to try to get these things done and take the steps that are necessary to do it.

For instance, one of the things we have done is to contract with the Soil Conservation Society of America to hold a conference, we hope in the autumn, to assess our total approach—to look at the management that we have used; what we have done that has worked in different states; what are we doing that is less than effective. We have to bring together all the lessons we have learned.

We want this to be a very tough, realistic critique of our performance. We hope to use methods like that to make sure that we meet these objectives in a timely way.

Senator KASTEN. Mr. Chairman, I have a couple of other questions I would like to submit to the record.

Senator BURDICK. Fine.

COSTS OF THE CRP BONUS PAYMENT

Senator BURDICK. Senator Harkin.

Senator HARKIN. Thank you, Mr. Chairman. I just wanted to follow up with the Secretary and others. My colleague, Senator Kasten, sort of left off on this bonus.

You said, Mr. Hertz, I believe, in consultation with Mr. Hall, who was working on his calculaton, that you gave a preliminary estimate at a cost of $40 to $50 million to extend that bonus. I assume that that is a statistic to extend the bonus to those farmers who signed up this year. You are not talking about going back a year; you are talking about those farmers who signed up for land this year.

Mr. HERTZ. Yes; it was just the last signup that was held in August 1986.

Senator HARKIN. That would be for land taken out this year, this fiscal year?

Mr. HERTZ. That is right.

Senator HARKIN. Not going back beyond that.

Mr. HERTZ. That is correct.

Senator HARKIN. You made an estimate that that would be $40 to $50 million.

Mr. HERTZ. I think it would be closer to $40.

Senator HARKIN. That sounds high to me. You said it was only 3 percent of the base acres. That still sounds very high. Would you provide a more accurate estimate for the record?

Mr. HERTZ. Yes, sir; our calculations used the figure of approximately 5½ million acres of commodity base that are now in the reserve; 3 percent of that represents 165,000 acres. Assuming a 100-bushel yield, and a payment of $2 per bushel, we came up with approximately $35 million.

Senator HARKIN. So now it is down to $35 million.

Mr. HERTZ. These numbers are approximate.

Senator HARKIN. Mr. Chairman, I would like to have, if we could get it for the record, a more accurate estimate.

Mr. HERTZ. Yes, sir. I will provide for the record an estimate of retroactively paying a bonus for 1987 corn base acres enrolled during the August 1986 signup.

[The information follows:]

Conservation Reserve Program Corn Base Reduction for Third Signup—August 1986

1987 crop contracted (acres)	358,000
Yield per acre (bushels)	89
Total bushels	31,862,000
Bonus cost at $2 per bushel	$63,724,000

Senator HARKIN. And provide that as soon as possible. The decision is supposed to be, when, this week sometime?

Mr. HERTZ. I think we could have it before the day is over, sir.

Senator HARKIN. If you could, I would like that. I want to take a look at what those costs are going to be, just in looking at fairness and equity, those farmers who signed up last fall and then all of a sudden, those who procrastinated. Again, I think Senator Grassley is absolutely right. A lot of those farmers who signed up last fall did so under stressful conditions. Some did it willingly, but a lot of them did it under duress. Bankers said to them, "You get into this program or else."

The ones that maybe stayed out are the ones that said, "Maybe I will take a look at it—maybe I will and maybe I won't. I will see what happens on the market." I think really what you are doing is skewing this thing. What you are doing is giving the bonus to those that are better off economically than those who went into the program previously.

It is very unfair. I would hope that you would make a decision to extend that bonus just to those individuals who at least signed up for this year. Again, if you wanted to talk about giving farmers assurance that you are not going to change things in the middle of the stream, this is one way you could do it. You could say, "Look, we are not going to change this thing. What we say now, you can count on it."

If you don't do that, if you go ahead with that bonus program like that, forget about your credibility. You won't have any credibility out there.

Do you want to respond?

THE CRP BID PROCESS

Mr. DUNLOP. Yes, sir; I have some general thoughts about it. The whole concept of the conservation title, and particularly the CRP part of it, was based upon a multiyear program that would be spread out over the life of a bill. It would be on a bid basis and it would be from year to year.

In other words, inherent in the whole process was that we had a challenge from the Congress to put in 45 million acres, and we were told to operate a program that assured that we get at least 40 million acres.

With a bid process, you have to expect changed circumstances. That is inherent in the whole process. We knew we weren't going to get up to that 40 million acres all in the first year. We have advised people of that all along. Inherent in the process of a bid is that idea of changing the deal.

That happens in business when they sell cars that go on sale or for a suit of clothes. Many times I have gone to the store and found what I have bought last week at $50 dollars is now on sale for $35. I mean, this is part of what a bid process entailed.

So frankly, I wouldn't agree with that particular aspect of your analysis. Sure, it causes difficulty for those people who didn't get in at that point in time, but we feel that we are operating the program fairly and as it was intended and at the least cost to the taxpayers, which is another consideration.

Senator HARKIN. I find that analogy a little bit strained, Mr. Secretary, on buying the suit of clothes. Obviously, I can buy another suit of clothes someplace else if I want to.

Mr. DUNLOP. We can have more bids.

Senator BURDICK. Could you yield? Where do you get those $35 dollar suits? [Laughter.]

Mr. DUNLOP. I guess my timing is off. [Laughter.]

Maybe I should say that I was thinking of buying a pair of dungarees and a shirt. That is one idea of a suit.

Senator HARKIN. I think your analogy falls down there. This is where he makes his livelihood. This is his farm. This is where he makes his income. Again, I think the message you are sending out to farmers is, "Hold out. If you just hang out, the Department is going to come back with a better incentive later on."

Mr. Scaling, is that what is happening?

Mr. SCALING. No, sir.

Senator HARKIN. The farmers who bid in last fall say, "I'm a damned fool for doing that. I should have held out and I would have gotten $2 a bushel more."

If you go out and talk to farmers that is what they are saying. "If I had just held out, I would have gotten $2 a bushel more."

Mr. SCALING. What about the farmers who held out and the county is up to the 25-percent limit and they can't get in at any price? It is a bid basis.

Senator HARKIN. In that case, it was clear to them they had reached those upper limits in that category. It is like you say: On an annual basis, yes, the bids will go up, but it is not anticipated that 3 or 4 months down the pike they are going to come back in and change the rules of the game.

Sure, you can say, well, it would have been more fair to say, "We are going to increase the bids, we are going to take higher bids. We are going to raise the level of the bids rather than the bonus, rather than just the bonus."

Mr. DUNLOP. Or bids could go down.

Senator HARKIN. Or you could do either one; open it back up again. Put everybody on an equal footing. That would be fair.

Mr. SCALING. That is what makes a horserace. You never know what the outcome is. You have to take a chance, and we in farming are gamblers. We are short-term pessimists and long-term optimists. We think next year is going to be much better than anything we ever had before. The bid basis is the only fair way for this to work.

Senator HARKIN. Mr. Scaling, I don't mind farmers gambling. They do it on weather and everything else. When the Department of Agriculture is bidrigging the horse against them, then it is a bit of a problem when they go out to bet. You are just not going to convince me that this is in any way, number one, fair.

But if you want to forget about that, forget about this fairness and say, "Well, this is open, we can change this thing any time," think about the message that it is sending to farmers; if you want to have credibility out there that you are not going to be changing these programs in the middle of the year sometime. Farmers will just procrastinate and say, "Heck, I will get a better deal if I just hang on."

Forget about the fairness issue. Think about what the farmers will do in the future as far as program initiatives by the Department of Agriculture.

OATS FOR SOIL CONSERVATION PURPOSES

Well, I want to get on another topic on the oats, on the cross compliance with oats. The Soil Conservation Service has been advising farmers to plant oats, obviously, for soil conservation purposes. ASCS says, "You can't do it, because we have got cross compliance for program participation."

So again, someone asked this question earlier, and I didn't get the answer, but how is the Department going to reconcile these differences where you say that it is good for conservation but you can't do it for cross compliance?

Mr. DUNLOP. Perhaps both Mr. Goldberg or Mr. Hertz and I could do that. Of course, we do encourage farmers to use oats and numerous types of crops like that as cover crops. The question is, are they going to disk them in or let them fall over, using them as a good conservation practice, because it contributes to holding and enriching the soil? Or, are the oats going to be harvested and marketed? So then that gets into a marketing and an ASCS question. There is no question that growing those types of crops is a very good thing for the soil as opposed to, say, growing soybeans or something else that might be much more stressful to the soil.

Senator HARKIN. Even if you harvest them, it is okay as a good cover crop. You don't have to let them lie there in the fall. You can harvest your oats.

Mr. DUNLOP. There would be stubble left and other things that would contribute to soil conservation. You couldn't harvest on conserving land.

Senator HARKIN. That is right. How are you going to reconcile these differences, though?

Mr. HERTZ. Senator, there is no difference. It is a well-known fact that in various parts of the country, various crops, including program crops, can be seeded as a cover crop because they may be the most efficient, cheap, and productive for the purpose.

The difference is, of course, as Mr. Dunlop points out, that you do not allow farmers to harvest the crop and sell the crop if they plant it for cover purposes. The conservation folks, both in ASCS and Soil Conservation Service, will tell you that cover crops are good conservation practices, good farming practices. They have said so for 100 years, and there is no reason for any conflict.

What you are saying is that we would allow them, even urge them to grow oats, but we would not allow them to grow oats for production. I don't know if I made it clear.

Senator HARKIN. I didn't understand that. You are saying that because of cross compliance you are not going to allow them to grow oats as a market crop when they have been growing marketable crops on that land in the past?

Mr. HERTZ. Senator, we will not allow them to grow oats for harvest if they do not have an oats base. Now, I have to tell you, Senator, that there are farmers all over the country who do have an oats base, and those people who grow oats under cross compliance within the base harvest them and sell the oats.

Senator HARKIN. Are you saying that on this cross compliance that you can grow oats, as long as you don't harvest them?

Mr. HERTZ. You can grow and harvest oats if you have an oats base.

Senator HARKIN. What, an oats base?

Mr. GOLDBERG. If you have an oats base, you can grow and market them within that base.

We combine barley and oats.

Mr. HERTZ. Senator, I think the response to your question as to whether you can grow oats without violating cross compliance restrictions for cover crops is yes, as long as they aren't harvested.

Senator BURDICK. Just a minute. If you cut the oats on the green side, semi-hay, is that OK?

Mr. HERTZ. Yes; as long as it isn't considered a program crop for harvest.

SECRETARY'S AUTHORITY TO EXEMPT OATS

Senator HARKIN. If I could, Mr. Secretary, just draw your attention to section 1031 of the 1985 bill and ask you to take a look at that and review that section, 1031, or section 505 of Public Law 99–198, which does provide for the Secretary to have the authority—I will read it:

> To suspend on a nationwide basis any limitation contained in subsection (a)——

which deals with his providing for an upward adjustment

> with respect to the crop acreage base for any program crop if the Secretary determines that: One, a short supply exists; or two, market factors exist that require suspension of the limitation to achieve the purposes of the program.

Again, the purposes of the program, basically, are to have an adequate set-aside, to promote conservation. There is a short supply of oats, and number two, market factors do exist that would require this to achieve the purposes of the program in terms of allowing them to go ahead and plant oats, especially if you have a situation where they are required to rotate on a beans-oats basis and they may not have that oats base. They may have to skip that one whole year.

I think section 1031 would allow the Secretary, under those conditions, to go ahead and permit those oats to be planted.

Mr. GOLDBERG. You are citing the Secretary's discretionary authority correctly, Senator.

Senator HARKIN. Yes.

Mr. GOLDBERG. That is the authority the Secretary is looking at now. He has the authority to exempt those oats, in the case you are speaking of, from cross compliance.

Senator HARKIN. You said you are reviewing that now?

Mr. GOLDBERG. He does have the authority to do that. We acknowledge that.

Senator HARKIN. Good. I am just saying that the authority exists there.

Mr. GOLDBERG. Oh, yes.

Senator HARKIN. I think the indications are there that perhaps this would be a wise thing to do, again, for purposes of conservation and also for purposes of giving some farmers some income, too, and not destroying the conservation part of the picture.

I am sorry, Mr. Chairman. I just have one more question.

Senator BURDICK. Fine.

FARM FORECLOSURES AND CROP LANDS

Senator HARKIN. The conservation reserve program with its 2-dollar-a-bushel bonus, I have received reports of farmers being coerced by banks to bid their land into the program. They do that. After the initial signup, the land is then foreclosed and sold by the bank for whatever the bank can get out of the property, which, of course, is worth more now because they have got that conservation reserve program in there for 10 years.

What kind of internal controls has the agency put in place to inhibit—this is my own phrase—abusive schemes like this? In other words, the banks aren't allowed to enter the CRP. They get the individuals to do it. They get the property; the bank sells it and then they get a higher price for it at that point.

Again, I would refer you to VII Code of Federal Regulations, part 7.4.28, to be very specific, again, which gives you the authority to take care of that kind of situation.

Are you aware of that happening out there?

Mr. HERTZ. Senator Harkin, we are aware of the other extreme in that we are having solicitations from bankers and farm credit systems wanting to put land in the conservation reserve after they have foreclosed, and we have said absolutely no to that. That idea originated, I think, with a farmer bidding in some 17,000 acres and wanting to split it up into individual parcels that would earn several payment allocations. We did not allow that.

Senator HARKIN. I am just asking you, you have not heard of anything like what I just said?

Mr. HERTZ. No, sir; I don't know that there is a lot we could do if a farmer put a portion of his land in the program and a year later he went bankrupt. The bank has the land. They have the privilege of selling it. I think it would be in our interest that a contract remain in effect and the conservation practices be maintained.

Senator HARKIN. What I think happened in a couple of cases that came into my office, in fact, a year had not passed. It happened just in this timeframe even before another crop was planted.

Mr. HERTZ. We are not aware of that.

Senator HARKIN. OK. I just wondered if you had heard of this practice.

Mr. GOLDBERG. Senator Harkin, I work with some farm credit people who had already foreclosed on a number of farms and now have the total package of their foreclosures, so to speak, and one of them immediately signed up for the CRP only to find out that we consider that particular lending agency as one person and they would only get $50,000 for the entire package.

As Mr. Hertz says, it works both ways. We, incidentally, denied their request to split it up.

Senator HARKIN. Thank you all very much.

George, I have been too easy on you. This is your first appearance up here before us. I have been too easy on you. I have to ask you a tough question.

Mr. DUNLOP. We are available any time, Senator. We enjoy coming up any time we can to be helpful.

RATIONALE FOR BUDGET REDUCTIONS

Senator HARKIN. I will ask you, Mr. Secretary, do you really think that this committee and this Congress are going to abide by the $142 million decrease in SCS and $221 million decrease in ASCS? Do you really think we are going to do that?

Mr. DUNLOP. For 11 years, different administrations, including this one and the previous one, have asked this committee to change its priorities. The rationale for that is, of course, that many of the activities that are identified for reprioritization have enormous local benefit and very little demonstrated federal benefit. We have requested to do other things with the federal dollar.

We know that you are under the same types of constraints that we are in terms of meeting these Gramm-Rudman targets in some fashion. We have an OMB that looks down on us and says, "You wlll have a budget that comports to that," and maybe your Appropriations Committee will go along with it. And if you do, we would submit that some of these programs that we repeatedly asked for trending downwards would be reduced.

We offer that the types of activities that we have identified as the conservation operations and the technical assistance, do, indeed, have the highest priority for the federal dollar. So the bottom line is, we sure hope you will look at it real hard.

Senator HARKIN. Is that answer, "No"? [Laughter.]

Thank you very much, Mr. Secretary. Thank you very much, Mr. Chairman.

Senator BURDICK. I am glad to see you, Senator Cochran.

SUFFICIENT FUNDING FOR THE CONSERVATION RESERVE

Senator COCHRAN. Thank you, Mr. Chairman. I appreciate the fact that you were not finished with the hearing when I arrived. You were just about to wind it up I imagine. Let me thank the witnesses who are part of today's panel for being here and helping our subcommittee by testifying on the subject of the next year's needs from a fiscal point of view.

I wonder whether or not the budget request is going to be sufficient to continue to support our conservation reserve program. I keep hearing from friends back in my state of Mississippi that the bidding is a very popular activity and that there is a lot of signup occurring. I wonder whether or not the budgeted amount is sufficient to take care of the support that we need in that program. The conservation reserve program was a very popular part of the farm bill last year.

I suppose Wilson Scaling is the one to answer that, or George Dunlop, or whoever is the appropriate member of the panel to deal with that question; or all of you may want to answer it.

Mr. SCALING. We think we will let Milton Hertz of ASCS answer that question, sir.

Mr. HERTZ. Thanks a lot. [Laughter.]

Mr. SCALING. Any time.

Mr. HERTZ. Senator Cochran, for fiscal year 1988, we have a request for approximately $1.4 billion to cover anticipated enrollment from the signup going on now and possibly another signup later this year.

For the rental payments that come due in October 1988, we do have the authority to issue commodity certificates to cover any cash shortfall.

As to the appropriation, we propose to handle it similarly to the way we treat the Public Law 480 appropriations—that is, a direct transfer to CCC for the specified program.

Senator COCHRAN. If some Member of the Senate asks us when we get to the floor if we have enough money, I thought that I would just ask you, is there enough in the budget to take care of the program or to move it forward as Congress authorized it to be moved forward?

Mr. HERTZ. Based on our projections of signups at this point in time, yes.

Senator COCHRAN. If we are confronted with an amendment by somebody who wants to add money to the CRP saying there is not enough money in the program, what can our response be if we try to support the administration?

Mr. HERTZ. We are anticipating a magic number in about 2 weeks as to the results of the current signup.

If that estimate is much, much higher than what we have projected, I think we would want to take a long, hard look at it to see whether it was cost effective and in a bid range that we want to accept. Based on these decisions, there is a chance we may need more money.

Senator COCHRAN. I am suspecting, without knowing, that there are a lot of landowners who would love to get their program approved and accepted into the conservation reserve program, and I hope that the administration will be flexible enough in its administration of the program and in its attitude toward it that we seriously consider accepting a lot of bids. Because I think we could save money in the process over the long term, and it would be a very wise thing for the administration to consider doing.

Mr. HERTZ. Senator Cochran, the farm bill language concerning the number of acres that may go into the reserve each year specifies not more than 45 million acres in the final year. I don't know that we will get anywhere close to that, but we would certainly look forward to doing so.

Mr. DUNLOP. Senator, I might say with respect to the four instruments that we have in the new farm bill, the CRP, the sodbuster, the swampbuster, and the conservation compliance, we really look at the conservation reserve as the home for those acres. We are saying to farmers, "You are going to have to have a lot of conservation measures perhaps, if the lands are highly erodible."

There is an alternative, and that is in the CRP. We have been very careful. We undertook considerable effort to make sure the eligibility requirements and standards for the conservation compliance are the same for CRP and vice versa.

So we not only see the need to do it for the reasons you described; but also, it is an integral part of the other parts of the conservation title of our farm bill.

Mr. HERTZ. I might add, Senator, I think that you very well describe the long-term benefits of the conservation reserve program in talking about land that, in a lot of cases, should never have been in production in the first place. Not only is that land expensive to farm, but from a competitive and efficiency standpoint, it is expensive to the Department, as well.

Senator COCHRAN. I really think this is an important program. Conservation generally is a very important undertaking for our Department of Agriculture. I think this committee is going to support your activities very generously. It always has. In the 6 years I served as chairman of this subcommittee, I am sure we added more money than the administration requested for the soil conservation programs. I think it was a wise investment and that we will continue to emphasize those programs here in the Congress.

NONFEDERAL CONSERVATION EFFORTS

Mr. DUNLOP. Senator, I wonder if I might pick up a little bit on a point you are developing here. When we have to operate under tight budget constraints like we are and have been, really, the committee has been generous; but it, in many ways, has been frugal, too. It has been tightly watching these things.

What we are finding now with the workload we have on the Food Security Act provisions, including the sodbuster, the swampbuster, and the conservation compliance, is that our people in the district offices, our state conservationists, area conservationists, and district conservationists, are finding we are going to have to involve the public in a way we never have before if we are going to meet this workload.

I offer for the consideration of the committee that there is a certain real dividend in that. In other words, in the past, we have gone to farmers and said, "You have a soil conservation problem and we are the government and we are going to do the plan for you; we are going to solve the problem for you; we are going to do the work; and you stand by and watch, come in and sign the papers, and we will send you a check for half the cost you might incur."

Now we are going to have to go out and involve them in helping us to write the plans. We are going to have to involve them in making a lot of the decisions that affect the way these programs will work and involve people who have never had to be involved before. This new element of having to bring people in simply because we are under budget constraints has that very desirable advantage.

So when you start being generous, you might keep in mind, these people at the Soil Conservation Service tell us and the committee that they think they can do the job in technical assistance and in conservation operations with the money we request.

There are those who are proposing to give them more dollars, some a lot more. Well, those people down at SCS say they can do it with the money we request. There are 3 years. Let's take them up on that. Let's see if they can't do it with that money this year and maybe next year. And if they can't, then let's start giving them the extra money. But right now, we would like to operate under the tight budget constraints that we have offered, because we think that that will then force us to bring in other people. We think that is going to have a long-range conservation benefit.

You know, we have been working for 50 years in soil conservation, and right now, we have only 40 percent of the farms operating under conservation plans; 60 percent are not. We have got to get these people involved. Right now, they are geared up. They are excited about it. These provisions of the new farm bill are the most innovative approaches. The Congress wrote them.

They are chomping at the bit to go out and do it. We would like to have the opportunity to include them as volunteers. If we have to operate in a tight budget way, that is going to happen, believe it or not, a lot quicker than it would if we just put everybody on the payroll.

IMPACT ON OTHER CONSERVATION PROGRAMS

Senator COCHRAN. I am impressed with and agree with your enthusiasm for the conservation provisions of the farm bill. I think they were very far-reaching and important changes, and I support what we did in the farm bill.

But I worry about the fact that we will not be able to have any kind of watershed programs, for instance, if we agree to go along with the proposal that has been submitted for the Soil Conservation Service budget. There are some cooperative activities that include the Soil Conservation Service and the Corps of Engineers which are very important in my state and which would have to be terminated if we approved the administration's request.

A lot of work has been planned, designed, and engineered, and we are ready to go forward with some construction work that would have to be abandoned if the President's request were just rubber stamped. I know the people who work for the Soil Conservation Service are imaginative; I know they are hardworking, and I know they are willing to do more than their share to carry out the intent of the law but I am not sure we could get the job done with the amount that is contained in the budget.

SUPPLEMENTAL FUNDING REQUESTS

The committee has received information that indicates that there is a need for supplemental funding to carry forward work under the conservation reserve program. I understand there has been no request received from the administration for such a supplemental.

Would you care to comment about the need for supplemental funding for the conservation reserve program?

Mr. DUNLOP. Senator, to my knowledge, we haven't heard about a supplemental request for the conservation reserve, but, rather, about the technical assistance under conservation compliance. Could that be what you might be referring to?

Senator COCHRAN. My note says:

> We have been receiving requests from constituents to consider a $95 million supplemental to assist with the implementation of the conservation reserve program.

Mr. Dunlop. Yes, sir; actually, this has been proposed by the National Association of Conservation Districts, and their concern is not so much with the CRP, but, rather, with the planning process under conservation compliance.

Their proposal, basically, is that they are concerned that with all the plans we have to do. As Chief Scaling said, over the next 3 years, a million plans have to be written. They are concerned that we don't have enough people to do that. So they have come up with a request for an appropriation of $95 million for this current fiscal year, 1987, and we presume, then, similar amounts for subsequent years.

We disagree with that for the reasons I was saying earlier: First of all, there aren't that many people trained and available that we can hire to do the job one-on-one. We feel that we can get the job done with the people we have and with the budget we have. It is going to be tough, but we think we can do it. Earlier in my testimony I outlined about eight or nine different things that we are doing now to be able to meet that goal without that $95 million.

Lord knows, if we had $95 million there are lots of things we could do. But very frankly, the last thing we need to do is go out and hire a lot of people that we would be able to use for 2 or 3 years and then start to have to RIF, because the planning workload would then go down. So we prefer not to see that money.

Senator Cochran. Thank you very much, Mr. Chairman.

IMPACT OF CONSERVATION RESERVE ON CROP PRODUCTION

Senator Burdick. I have two more areas here that we should be able to wind up very soon so you can get back to your respective offices.

What is your expectation for 1987? How much of a decrease in production will be seen as a result of the conservation reserve program? Is there anybody that wants to handle this?

Mr. Hertz. Senator Burdick, I don't know that we can put an exact figure on that. We could calculate the cumulative percentage of base acreage that we have in the conservation reserve. Our overall objective through fiscal year 1987 is to retire 15 million acres. We might assume that 10 million acres of that will be a reduction in CCC base crops, but I don't know that I could give you a bottom line answer on that.

Mr. Goldberg. Senator Burdick, we could give you a better, more accurate projection after we complete the current signup.

Senator Burdick. Would you send the committee the projections as soon as you have them?

Mr. Goldberg. I would be happy to do that.

Senator Burdick. Thank you.

Mr. Hertz. Senator Burdick, I can make one comment. As we look at the overall projections of the conservation reserve, if we were to enroll a 75-percent ratio of base acreage, the cost of the conservation reserve program would be about a wash. It would come out just about even and decrease the deficiency payments as well as the land rental payments.

So as an example, that would indicate that it is quite cost effective.

COSTS OF GRASS SEEDING

Senator BURDICK. Another complaint I have had is that the cost of grass seed for the land going into the conservation reserve program is already high and getting higher. What is the cost of seeding something through cost sharing; and second, is there any alternative grass seeds that might be used?

Mr. HERTZ. If I can make a quick comment, Senator Burdick, the cost sharing is at a rate of 50 percent, and the dollar amount really is open.

But what we are seeing, exactly as you said, is that grass seed is getting exceedingly high, and we are suggesting that if in a given area grass seed is hard to come by or very expensive, we will let the producer establish a cover crop on that land and defer for a year planting it to grass.

Mr. SCALING. Or possibly for 2 years until the cost of the grass seed tends to come back down.

Mr. HERTZ. Until it stabilizes.

Senator BURDICK. I understand that the regulations call for the high-priced native grass. Is that correct?

Mr. SCALING. There are four different ways you can go, sir: One is native grass, which is native to that area, which I might say I feel is best; or you can use introduced grasses, wind breaks or trees, or wildlife habitat.

We have a chance to put this marginal land back into something permanent, and I think the way to do this is to put it back in native grasses that will thrive in that area. In 10 years, this is going to be an increased incentive not to plow this land back up again if you have a good stand of native grass that never should have been touched to start with.

Senator BURDICK. That wouldn't necessarily rule out local tame grass, then, would it?

Mr. SCALING. No, sir.

GREAT PLAINS CONSERVATION PROGRAM CONTRACTS

Senator BURDICK. The last area of inquiry would be on the Great Plains conservation program. Long-term contracts providing assistance to farmers and ranchers in a number of states to enable them to prevent or reduce the effects of climatic hazards to soil, water, plant and wildlife resources would be eliminated, as I understand it, under the President's fiscal year 1988 budget.

The Great Plains conservation program that provides cost sharing and technical assistance to farmers and ranchers experiencing recurring drought wind erosion problems is slated for termination as quickly as possible.

At the end of fiscal year 1986, there were 5,616 active contracts covering over 15 million acres of land in the Great Plains conservation program.

How would contracts under the Great Plains conservation program be disposed of by the end of fiscal year 1988? You can comment generally on the question.

Mr. BRIDGE. Funds have been obligated for those contracts that are in place. They will continue to be serviced.

We would not sign any new contracts in fiscal year 1988.

Senator BURDICK. What is the length of those contracts?

Mr. BRIDGE. They average about 6 years but can range up to 10 years.

Senator BURDICK. And there would be no new contracts issued; is that correct?

Mr. BRIDGE. That is right.

Senator BURDICK. I wonder if you would provide me with a timetable showing the termination schedules of the amount of federal funding committed for the next 12 fiscal quarters if you could. We can figure out what the fadeout is going to be. Would you do that?

Mr. DUNLOP. In Great Plains?

Senator BURDICK. Yes.

SUBMITTED QUESTIONS

Gentlemen, that is all I have here, but I will be submitting additional questions. I am also advised that the following Senators will also submit questions: Senators Chiles, Sasser, Bumpers, Sarbanes, McClure, Kasten, Specter and Domenici.

We would appreciate it if you would respond to them in a rather expeditious manner for the record.

[The following questions were not asked at the hearing but were submitted for response for the record:]

Soil Conservation Service

Questions Submitted by Senator Burdick

RESCISSIONS

Question: I would like to know what the result of the proposed rescission is across the country. I understand that you are holding up the funding for those various programs and that, therefore, no work is being done. Is that true?

Answer: All work that was started prior to January 5, 1987, is being done and will continue for the remainder of the year, but no new contracts are being initiated. The proposed rescission freezes all unobligated cost-share and financial assistance funds for the 45 day period prescribed in the Budget Control and Impoundment Act of 1974. The result is that $96 million of Watershed and Flood Prevention, $8 million of Great Plains Conservation Program, and $5 million of Resource Conservation and Development work will not be done during Fiscal Year 1987 if Congress approves the proposed rescission. However, technical assistance for these programs would continue through the year

GREAT PLAINS CONSERVATION PROGRAM

Question: Would you please provide a table for the subcommittee showing current contract termination schedules and the amount of Federal funding committed for the next 12 fiscal quarters.

PROJECTED CONTRACT TERMINATION
SCHEDULE AND COSTS

	FY 1987 a/	FY 1988	FY 1989	FY 1990
Active contracts (No.)	6,141	5,003	3,986	3,083
Expiring contracts (No.)	1,138	1,017	903	741
Estimated annual costs:	($000's)			
Technical assistance b/	$8,890	$7,242	$5,770	$4,462
Financial assistance c/	$8,166	$6,652	$5,301	$4,099

a/ Figures reflect proposed rescission ($8 million); no new contracts signed after January 5, 1987.

b/ Beginning in FY 1988, technical assistance costs to service ongoing GPCP contracts would be absorbed within the Conservation Technical Assistance account, a total of $27 million from FY 1988 to FY 1996 when all existing contracts would be expired.

c/ Funds for financial assistance are obligated for the entire life of the contract in the year the contract is signed. The amounts shown here represent actual payments (outlays) that would be made as the work is completed over the life of the contracts which can be up to 10 years. Approximately $25 million would be outlayed in total from FY 1988 to FY 1996 in cost-share payments related to existing GPCP contracts. The President's budget does reflect these outlays.

WIND EROSION CONDITIONS IN THE GREAT PLAINS

Question: What are the Department's projections for wind erosion and resulting land damage in the 1986-87 season?

Answer: A copy of the first wind erosion report for the 1986-87 season is being provided for the record. Additional reports will be issued throughout the remainder of the year. [The information follows:]

WIND EROSION CONDITIONS - GREAT PLAINS

Summary of Local Estimates as of 12/31/86
(First Report of the 1987 Wind Erosion Season)

This report is a summary of wind erosion conditions from November 1, 1986 to December 31, 1986. It is based on estimates from SCS field offices in cooperation with USDA field representatives and local authorities. Reports were submitted from 541 counties in the Great Plains States. Counties reporting are those in which wind erosion is prevalent or is expected during the current wind erosion season. The acreage of land damaged is cumulative for the period. Wind erosion figures for this same period last year are given for comparison.

Land Damaged

The 541 counties reported 1,525,406 acres damaged through the end of December. Of the total land reported damaged 97.5 percent (1,487,599 acres) was cropland, 1.7 percent (26,020 acres) rangeland, and 0.8 percent (11,787 acres) other land. The Northern Plains States reported 73 percent of the land damaged (1,114,329 acres), and the Southern Plains States reported 27 percent (411,077 acres). The greatest damage was in Montana (761,077 acres) or 49.9 percent of the total, and the least was in New Mexico (3400 acres) for this period. Total land damaged this year is 33.1 percent more than the land damaged during the same period last year and 43.9 percent above the 1970-1984 average.

Crops or Cover destroyed on Land not Damaged

Crops or cover were destroyed on 157,435 acres of land not damaged. Of this total 71.0 percent (111,805 acres) was reported by the Northern Great Plains States. Montana had 92,650 acres or 58.9 percent of the total.

Emergency Tillage to Prevent Land Damage

Emergency tillage to prevent land damage was reported in every state except North Dakota. A total of 214,100 acres was so treated. Texas reported 42.9 percent (91,750 acres) of the emergency tillage. The Northern Great Plains states reported only 19.7 percent of the emergency tillage.

Land in Condition to Blow

Land reported in condition to blow was 13,480,239 acres which is about 1 million acres less than this time last year. This amount is 32.8 percent above the 1970-1984 average and can be attributed primarily to the states of Montana and North Dakota. Of all the land reported in condition to blow, 62.0 percent was in the Northern Great Plains States and 38.0 percent in the Southern Great Plains States.

Major contributing factors to wind erosion this season are lack of snow cover, inadequate vegetative cover, and high velocity winds in selected areas.

Wind Erosion Conditions - Great Plains 01/28/87

	LAND DAMAGED						CROPS OR COVER DESTROYED				LAND PROTECTED DUE TO EMERGENCY TILLAGE	LAND IN CONDITION TO BLOW	
States	County Reports Number	Cropland Acres	Rangeland Acres	Other Land Acres	Total Land Damaged 12-31-86	Total Land Damaged 12-31-85	Average 1970-84	Cropland Acres	Rangeland Acres	Other Land Acres	Total Acres	Total Acres	Total Acres	Average 1970-84 Acres
Northern:													
Montana	40	753,357	6,400	1,320	761,077	217,380	119,000	92,650	0	0	92,650	450	2,277,350	783,000
Nebraska	21	13,980	1,995	200	16,175	72,885	42,000	1,645	75	10	1,730	29,260	389,650	239,000
North Dakota	53	199,630	0	0	199,630	68,450	108,000	7,365	0	0	7,365	0	4,191,013	1,797,000
South Dakota	66	91,580	100	130	91,810	8,030	109,000	6,060	0	0	6,060	5,460	1,232,900	1,214,000
Wyoming	23	33,825	10,100	1,712	45,637	32,535	14,000	4,000	0	0	4,000	7,000	263,885	125,000
Subtotal	203	1,092,372	18,595	3,362	1,114,329	399,280	392,000	111,720	75	10	111,805	42,170	8,354,798	4,158,000
Southern:													
Colorado	37	29,600	0	440	30,040	5,000	20,000	16,000	0	0	16,000	12,660	986,185	596,000
Kansas	105	196,200	600	0	196,800	144,500	36,000	13,100	500	0	13,600	52,800	1,728,000	1,109,000
New Mexico	19	2,600	200	600	3,400	8,860	26,000	350	0	0	350	600	6,000	193,000
Oklahoma	30	27,590	0	630	28,220	70,172	33,000	7,230	0	0	7,230	14,120	670,100	388,000
Texas	147	139,237	6,625	6,755	152,617	393,415	349,000	7,450	0	1,000	8,450	91,750	1,735,156	2,614,000
Subtotal	338	395,227	7,425	8,425	411,077	621,947	464,000	44,130	500	1,000	45,630	171,930	5,125,441	4,306,000
Grand Total	541	1,487,599	26,020	11,787	1,525,406	1,021,227	856,000	155,850	575	1,010	157,435	214,100	13,480,239	9,064,000

PROJECTED WIND EROSION CONDITIONS

Question: Is it expected to be higher than in the 1985-86 season.

Answer: The reports are based on actual conditions at the time of the report and are not a predictive model. The initial report does indicate that the rates reported for 1986-87 are 32.8 percent above the 1970-84 average.

IMPACT OF ELIMINATING GPCP

Question: Without the Great Plains Conservation Program, and assuming there is no other form of assistance similar to it, how would the natural resources of these ten states be affected?

Answer: The latest Natural Resources Inventory (NRI) indicates that 56 percent of the agricultural lands in the 518 counties is still in need of some level of conservation treatment. The average combined wind and water erosion for these counties is nine tons/acre or about twice that recommended by the SCS Field Office Technical Guide for most soils as being adequate to protect the resource base. It is difficult to predict the impact of terminating GPCP on the natural resources of the ten states affected. This effect would be dependent upon the degree to which private, local, and state interests are willing to assume additional responsibilities for resource protection. At present, the private landowner is contributing about 50 percent of the cost of providing resource protection on his or her land. State and local interests provide only a small additional fraction. Therefore, given these conditions we would anticipate the percentage of agricultural land needing some level of treatment, in the absence of GPCP, to remain about the same with perhaps a slight increase over time. The highly erodible lands provisions of the Food Security Act of 1985 will influence the level of conservation treatment on cropland determined to be highly erodible. However, other conservation needs, such as rangeland improvement, are an important part of GPCP. The following table provides some insight into the remaining conservation workload in the 518 Great Plains counties.

Great Plains Region (518 GPCP countries)
Acres of Land Needing Conservation Treatment

March 3, 1987

State	Nonfederal Rural Land Area		Cropland		
	Total	Needing Treatment	Total	Needing Treatment	Highly Erodible
	- - - - - (1,000 acres) -				
Colorado	32,081.8	22,517.6	9,501.4	7,668.9	6,061.2
Kansas	32,731.3	17,586.5	21,537.4	12,385.9	8,353.0
Montana	53,835.0	28,177.2	15,813.5	10,581.3	9,327.5
Nebraska	36,869.7	12,129.2	12,401.8	4,741.7	3,787.2
New Mexico	31,893.6	21,315.3	1,824.4	1,162.1	1,377.8
North Dakota	30,531.2	12,210.0	17,974.1	8,861.0	2,159.8
Oklahoma	24,673.6	12,734.4	10,322.6	4,507.9	4,585.1
South Dakota	38,790.7	15,075.6	12,796.8	5,329.5	1,423.7
Texas	108,420.7	77,305.3	23,077.8	16,375.5	12,138.7
Wyoming	30,013.9	16,567.8	2,267.4	839.5	172.2
TOTAL	419,841.5	235,618.9	127,517.2	72,453.3	49,386.2

Source: 1982 National Resources Inventory

POTENTIAL RESOURCE DEGRADATION IN THE GREAT PLAINS

Question: Without conservation efforts, how long would it be before degradation of the land would become a severe problem where today such land might require only slight or moderate conservation treatment?

Answer: It is not possible to predict with any certainty the rate of degradation of lands in the Great Plains counties because of changing weather patterns and the cycles of drought and wetness that may occur. We saw the "Dust Bowl" develop over a very short time frame and it would be unrealistic to believe that today the development period would be any longer if conservation efforts were to cease.

GPCP PROGRAM CONTINUATION COSTS

Question: Please provide, for the record, on a state basis, the costs incurred for Fiscal Years 1987, 1988 and 1989 if the States opt for full continuation of the Great Plains Conservation Program.

Answer: It would be difficult to project what costs the States might incur if they opted to continue the Great Plains Conservation Program on an individual basis. Priorities would likely vary in relation to current GPCP priorities, and costs for technical assistance and overhead could be somewhat different from those incurred by SCS depending upon how the States would choose to manage the program. The following table shows the actual obligations incurred by SCS in the 10 Great Plains program states in fiscal year 1986. This would provide our best approximation of the cost to each State if they would opt to continue the program at the same level in FY 1988 and future years.

GREAT PLAINS CONSERVATION PROGRAM
PROJECTED ANNUAL OBLIGATIONS BASED ON
1986 DOLLARS

	Technical Assistance	Financial Assistance	TOTAL
Colorado	$679,501	$1,063,803	$1,743,304
Kansas	879,651	969,079	1,848,730
Montana	631,046	1,002,520	1,633,566
Nebraska	919,299	958,297	1,877,596
New Mexico	449,742	665,758	1,115,500
North Dakota	635,403	723,579	1,358,982
Oklahoma	623,899	1,173,152	1,797,051
South Dakota	801,092	1,076,331	1,877,423
Texas	2,284,871	3,256,220	5,541,091
Wyoming	451,631	650,710	1,102,341
Central program management and technical support	610,058	--	610,058
TOTAL	$8,966,193	$11,539,449	$20,505,642

RESOURCE CONSERVATION AND DEVELOPMENT

Question: Including the rescission in fiscal year 1987 funds, the President's budget proposes to terminate the Resource Conservation and Development program early in fiscal year 1988. Federal funding of over $25 million would no longer be made available for ongoing activities; $10 million is requested for lump sum payments, severance pay and other nonrecurring costs to terminate the program.

The President's budget proposes to place responsibility for approximately 455 plans and 368 measures underway at the start of fiscal year 1988 in the hands of state and local organizations within about three months time.

Have local organizations and units of government been notified of this plan?

Answer: We have not notified local organizations and units of government of this proposal. They would not be notified until after the proposal is approved by the Congress. Local sponsors are aware that the program has been proposed for termination.

STAFF YEARS

Question: In a letter sent to the Subcommittee by Secretary Lyng on February 20, 1987, there is discussion of the staffing requirements necessary for compliance with the conservation reserve program. Secretary Lyng stated that during the peak year of the Reserve, 4,000 staff years will be required. He notes that currently SCS has 3,900 technical assistance staff years available for direct program operations. Although the Secretary acknowledges there may need to be a substantial expansion of Conservation Reserve efforts, he believes that "SCS does have the capacity to redirect existing resources to accommodate a temporary increase in the conservation planning workload."

The information I have shows that by your calculations, you will have to transfer 838 staff from one state to another in 1988 in order to carry out the Farm Bill program. Most of these transfers will go to the Midwest because of the increased workload there. This is 21 percent of your direct field operations staff.

Have you budgeted for moving these staff and families?

Answer: We have not specifically identified these costs in our budget because transfers tend to be permanent in nature and will be considered our last resort for placing staff in the high workload states. Our initial task is to address the workload demand expected to occur during the peak years of FY 1988 and 1989. We plan to take advantage of every management initiative possible in order to carry out the program without requesting additional funding resources. We first plan to mobilize our "Earth Teams", that is volunteers, to come in and do some of the non-technical work now being done in field offices thus freeing up our technicians to carry out farm bill related activities. We expect contributions of personnel from state and local agencies to increase in response to the farm bill workload. We plan to utilize short term details of personnel where appropriate. We also expect to save some staff years through productivity improvements such as field office automation, new conservation planning training modules, new timekeeping system, and streamlining the conservation planning process.

We normally transfer about 200 field staff on an annual basis. The costs of making these transfers are included in our FY 1988 budget request. However, use of permanent transfers will be used only as a last resort. In addition, if more transfers are needed after we have taken all the actions previously discussed, we will then look at temporarily cutting back in other areas of expenditures in order to pay for these moves.

Question: How long will such a transfer take?

Answer: Any needed transfers should be completed by early 1988.

Question: Your testimony indicates a budget increase for travel time to send staff to high workload areas. These people are going to be needed for months, and perhaps, years to do the work.

Do you plan to make these transfers on a temporary basis?

Answer: Yes, the budget increase for travel is to provide temporary assistance to the high workload areas in the form of short term details.

Question: Isn't it true that a comparison of staff requirements might be misleading with respect to the orientation of staff who will be required to implement the farm bill provisions and staff who are working under current programs?

Answer: This is somewhat true. However, most of our field staff receive similar basic training during the early years of their career and most have had some what similar academic training thus enabling them to adapt to working in most geographical areas. There is also a high degree of national consistency in SCS basic training; hence, most of our employees who perform even specialized duties such as range conservationist or irrigation specialist could be retrained so that they could conduct those activities needed to service the conservation provisions of the farm bill.

SCS STAFF YEAR DISTRIBUTION BY PROGRAM

Question: Would you please provide the subcommittee with a table of the number of staff hours and their respective program assignments over the past five fiscal years, as appropriated and as requested in the President's budget for each of these fiscal years, including the 1988 request?

Answer: The following table provides the information requested:

SOIL CONSERVATION SERVICE
STAFF YEARS BY PROGRAM a/

	FY 1984		FY 1985		FY 1986		FY 1987		FY 1988
	Budget Request	Actual	Budget Request	Actual	Budget Request	Actual	Budget Request	Current Estimate	Budget Request
Conservation Operations									
Technical Assistance............	8,517	8,399	8,483	8,231	5,887	7,717	7,937	8,244	7,913
Inventory & Monitoring..........	396	325	391	320	82	244	32	238	30
Soil Surveys....................	1,673	1,585	1,608	1,541	1,178	1,516	1,543	1,557	1,706
Snow Surveys & Water Forecasting	78	82	78	79	21	82	79	83	83
Operation of Plant Materials Centrs.	118	117	118	114	118	107	114	115	115
Resource Appraisal & Progr. Develpt.	78	31	37	33	8	39	3	30	8
Rural Clean Water Program.......	0	1	0	1	0	4	0		0
Total, Conservation Operations..	10,860	10,540	10,715	10,319	7,294	9,709	9,708	10,267	9,855
River Basin Surveys & Invest....	303	309	303	309	137	307	30	267	77
Watershed Planning Auth.by PL-566	208	200	201	200	70	191	18	200	40
Watershed & Flood Prevention Opera.									
Flood Prevention Operations......	324	340	324	326	157	332	33	336	66
Emergency Watershed Protection Opera	36	68	36	$60	13	79	7	105	0
Small Watershed Authorized by PL-566	1,265	1,702	1,228	1,610	586	1,515	163	1,354	365
Total Watershed & Flood Prevention	1,625	2,110	1,588	1,996	756	1,926	203	1,795	431
Great Plains Conservation Program	292	266	283	247	90	249	0	259	40
Resource Conservation & Development	0	415	0	395	100	395	39	406	87
Subtotal, SCS................	13,288	13,840	13,090	13,466	8,447	12,777	9,998	13,194	10,530
Trust Funds....................	8	22	18	24	6	19	2	12	12
Rural Abandoned Mine Program....	127	97	105	122	84	99	0	128	0
Colorado River Salinity Control.	77	0	77	0	0	0			
Non-Ceiling.....................	(47)	(184)	(109	(190)	(40)	(163)	(102)	(171)	(87)
TOTAL, SCS.....................	13,500	13,959	13,290	13,612	8,537	12,895	10,000	13,334	b/10,542

a/ Each staff year is equivalent to 2,087 staff hours.
b/ Ceiling in Appropriation Act is 14,177 Available Funds will support 13,334.

WATERSHED PLANNING

Question: The Fiscal Year 1988 budget calls for the closeout of activities under the Watershed Planning account. Fiscal Year 1987 appropriations of $8.5 million would be scaled back by $3.1 million in Fiscal Year 1988, with termination of all Federal funding by the end of Fiscal Year 1988. No new planning starts would be initiated and work on all ongoing projects would cease. State and local parties would be expected to continue projects of value, (funding for North Dakota projects in Fiscal Year 1987 is estimated at $87,615 with phase-out costs of $56,858 in Fiscal Year 1988. Of 32 watershed plans authorized comprising 4.2 million acres in North Dakota as of September 30, 1986, 18 projects, comprising 2.3 million acres, were completed.) If the Soil Conservation Service is to maintain a balanced approach in the use and set-aside of erodible lands, would it make sense to continue small scale watershed planning?

Answer: It makes sense for sponsors to continue small scale watershed planning and installation of projects that would provide them with desired local benefits. However at the National level, there must be a balance between funding Federal programs and the need to continue reducing the Federal deficit without endangering the Nation's economic health and military strength. We realize that the Conservation Reserve program will not necessarily solve all the resource problems that a small watershed project would solve, but by the same token, a small watershed project does not help to reduce surplus crop production by removing highly erodible cropland from production. If local sponsors decide to find and commit resources for a scaled down small watershed program, the tradition of cooperation between Federal and local conservation efforts would continue and it would provide the balance of programs that you have questioned.

Question: What purpose do watershed planning projects serve?

Answer: The primary purposes served by watershed projects are to prevent damage from erosion, flood water and sediment; further the conservation, development, utilization and disposal of water; and to conserve and properly use land. The watershed plan describes the steps that must be taken to solve the resource problems in the watershed and it states the responsibilities, including the cost-share agreement, that the sponsor and the Federal government have. Benefits that are expected to occur after the project is installed are also documented in the plan.

Question: Do State and local governments have the resources and the expertise to pick up "midstream" to continue ongoing planning projects.

Answer: A few States have their own planning staffs and some others contribute funds or share in doing the work with the Soil Conservation Service. These States could pick up in midstream and complete the planning process. however, the majority of the States currently rely entirely on SCS to provide the expertise for water resource planning and they would have to either develop the expertise or hire another party to continue the ongoing work.

Question: Would State and local agencies likely initiate new watershed planning projects?

Answer: Some States and local agencies would continue planning and initiate new watershed projects, and some States would initiate new programs. However, many States with rural populations and low income areas probably would not be able to do this. They would have to substitute other Federal and non-Federal programs to help solve upstream flood damage and other agricultural problems.

Question: There are 635 watershed planning projects Nationwide that have not been completed as of September 30,1986. Could you please provide the subcommittee with the location of these projects and tell us what the per capita income is in these counties/SMSA's?

Answer: This information has been provided for the record.

[The Information Follows:]

Public Law 566 Watershed in Preconstruction, Construction and Planning

CODE=1-- PRECONSTRUCTION 2--CONSTRUCTION 3--PLANNING 3/02/87

CODE	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
1	AL	BEAR-CAINE CREEKS	27,200	DALLAS, PERRY	$6,187
1	AL	HARRISON MILL-PAN	29,200	HOUSTON, GENEVA, DALE	$7,622
1	AL	MOORES CREEK	11,580	CHAMBERS	$6,918
CODE TOTAL			67,980		
2	AL	MUSH CREEK	38,726	DALLAS, LOWNDES	$6,569
2	AL	POWELL CREEK	42,350	HALE, MARENGO	$6,214
2	AL	TALLASEEHATCHIE C	131,077	CLAY, TALLADEGA	$6,848
2	AL	TOWN CREEK	161,000	COLBERT, FRANKLIN, LAWRENCE	$7,287
2	AL	WILKERSON CREEK	23,400	COFFEE, DALE, GENEVA	$7,288
2	AL	KELLY-PRESTON MIL	15,500	DALE	$6,988
2	AL	BIG NANCE CREEK	118,925	LAWERENCE	$5,941
2	AL	BUCK CREEK	13,900	COVINGTON	$7,339
2	AL	CHOCCOLOCCO CREEK	240,600	CALHOUN, CLAY, CLEBURNE, TALLADEG	$6,783
2	AL	CROOKED CREEK	63,558	CLAY, RANDOLPH	$6,655
2	AL	CYPRESS CREEK (TN	135,360	LAUDERDALE, WAYNE (TN)	$7,184
2	AL	DYNNE CREEK	16,600	CLEBURNE	$5,820
2	AL	FACTORY CREEK	51,600	SUMTER	$5,905
2	AL	BEAR CREEK-SOUTHE	12,900	GENEVA, HOUSTON	$7,939
CODE TOTAL			1,065,496		
3	AL	CAMP BRANCH	25,000	DALE, HOUSTON	$7,797
3	AL	CHANDLER MOUNTAIN	7,040	ST. CLAIR	$6,354
3	AL	DRY CREEK (MARENG	25,920	MARENGO	$6,736
3	AL	LITTLE CATOMA CRE	32,000	MONTGOMERY, BULLOCK	$8,606
3	AL	MEMPHIS-NOXUBEE W	94,200	PICKENS, SUMTER	$6,037
3	AL	PATES CREEK WATER	12,100	HOUSTON, GENEVA	$7,939
CODE TOTAL			196,260		
ST TOTAL			1,329,736		
1	AR	BIG SLOUGH	70,160	CLAY, GREENE	$7,319
1	AR	CROW CREEK	17,324	ST. FRANCIS	$7,277
1	AR	LARKIN CREEK	35,758	LEE, ST. FRANCIS	$6,602
1	AR	LOWER TRI-COUNTY	130,147	INDEPENDENCE, LAWRENCE, SHARP	$7,531
1	AR	OZAN CREEKS	63,618	HEMPSTEAD	$7,123
CODE TOTAL			317,007		
2	AR	PLUM BAYOU(FLAT B	21,037	JEFFERSON	$8,078
2	AR	POINSETT	51,326	CRAIGHEAD, POINSETT	$8,096
2	AR	SOUTH FORK	44,851	MONTGOMERY	$6,103
2	AR	SOUTH FOURCHE	248,990	PERRY, YELL, SALINE, GARLAND	$7,403
2	AR	UPPER OUACHITA RI	29,268	POLK	$6,641
2	AR	UPPER PETIT JEAN	211,620	LOGAN, SCOTT, SEBASTIAN	$7,439
2	AR	UPPER TRI-COUNTY	95,893	INDEPENDENCE, LAWRENCE, SHARP	$7,531
2	AR	NORTH FORK OF OZA	46,434	HEMPSTEAD, HOWARD, PIKE	$7,526
2	AR	LEE-PHILLIPS	83,504	LEE, PHILLIPS	$6,172
2	AR	FLAT ROCK CREEK	18,952	CRAWFORD	$6,652
2	AR	FOURCHE CREEK	190,400	RANDOLPH,RIPLEY(MO)	$5,664
2	AR	CEDAR-PINEY CREEK	27,040	YELL	$7,021
CODE TOTAL			1,069,315		
3	AR	BOYDSVILLE WATERS	31,561	CLAY	$7,351
3	AR	DUCK CREEK WATERS	10,831	LONOKE, PRAIRIE	$8,186
3	AR	DUNN CREEK WATERS	23,540	LONOKE, PRAIRIE	$8,186
3	AR	EAST FORK CADRON	198,397	CLEBURNE, FAULKNER, WHITE	$7,196
3	AR	LOWER CADRON CREE	81,000	CONWAY, FAULKNER	$7,221

C D E	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
3	AR	LOWER CANEY BAYOU	8,500	CHICOT	$6,114
3	AR	NORTH FORK CADRON	209,000	CLEBURNE, CONWAY, FAULKNER, VAN B	$6,843
3	AR	TYRONZA RIVER	229,703	MISSISSIPPI, POINSETT	$7,965
3	AR	YOCONA-SPYBUCK	38,594	ST. FRANCIS, LEE	$6,602
CODE TOTAL			831,126		
	ST TOTAL		2,217,448		
2	AZ	APACHE JUNCTION-G	89,983	MARICOPA, PINAL	$9,352
2	AZ	BUCKHORN-MESA	69,172	MARICOPA, PINAL	$9,352
2	AZ	HARQUAHALA VALLEY	239,360	MARICOPA, YUMA	$9,593
2	AZ	WILLIAMS-CHANDLER	136,775	MARICOPA, PINAL	$9,352
CODE TOTAL			535,290		
3	AZ	EAGLE TAIL MOUNTA	126,000	MARICOPA	$10,610
3	AZ	YUMA MESA	25,000	YUMA	$8,576
CODE TOTAL			151,000		
	ST TOTAL		686,290		
1	CA	LOWER SILVER CREE	27,700	SANTA CLARA	$13,530
1	CA	WOODLAKE-ANTELOPE	17,900	TULARE	$8,774
CODE TOTAL			45,600		
2	CA	MARSH-KELLOGG CRE	116,420	ALAMEDA, CONTRA COSTA	$13,144
2	CA	REVOLON	17,700	VENTURA	$10,864
2	CA	TEHACHAPI	32,420	KERN	$9,742
2	CA	UPPER LLAGAS CREE	35,000	SANTA CLARA	$13,560
2	CA	BEARDSLEY	20,500	VENTURA	$10,864
2	CA	CARPINTERIA VALLE	15,700	SANTA BARBARA	$12,216
2	CA	CENTRAL SONOMA	50,000	SONOMA	$10,611
2	CA	LOWER LLAGAS CREE	19,200	SANTA CLARA	$13,530
CODE TOTAL			306,940		
3	CA	CULL CREEK	4,030	ALAMEDA	$12,676
3	CA	LELAND FREEBORN S	24,000	KERN	$9,742
3	CA	SOUTH FORK KINGS	118,000	KINGS	$8,771
3	CA	UPPER PENITENCIA	15,300	SANTA CLARA	$13,530
3	CA	UPPER STONY CREEK	243,100	GLENN, COLUSA, LAKE	$12,319
CODE TOTAL			404,430		
	ST TOTAL		756,970		
1	CO	SHAVANO VALLEY	35,200	MONTROSE	$7,053
1	CO	WOLF CREEK-HIGHLA	110,870	POWERS	$7,792
CODE TOTAL			146,070		
2	CO	HOME SUPPLY	55,595	LARIMER, WELD	$9,286
2	CO	SEDGWICK-SAND DRA	66,714	SEDGWICK, CHEYENNE(NE), DEUEL(NE)	$11,914
CODE TOTAL			122,309		
3	CO	SPRING CREEK	62,600	LARIMER, WELD, LARAMIE(WY)	$8,873
CODE TOTAL			62,600		
	ST TOTAL		330,979		

CDE	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
1	CT	MILL-HORSE BROOK	11,230	WINDHAM, NEW LONDON	$10,292
CODE TOTAL			11,230		
2	CT	NORWALK RIVER	20,310	FAIRFIELD	$15,698
2	CT	SOUTH BRANCH PARK	30,080	HARTFORD	$12,901
2	CT	AVERY BROOK	1,664	HARTFORD	$12,901
2	CT	FARM BROOK	2,930	NEW HAVEN	$11,332
CODE TOTAL			54,984		
3	CT	FARM RIVER	12,990	NEW HAVEN	$11,332
3	CT	HARBOR BROOK	7,700	NEW HAVEN	$11,332
3	CT	YANTIC RIVER	61,350	NEW LONDON	$11,197
CODE TOTAL			82,040		
	ST TOTAL		148,254		
2	DE	MARSHYHOPE CREEK	100,600	KENT, SUSSEX, CAROLINE(MD), DORCH	$8,744
2	DE	UPPER CHOPTANK RI	57,000	KENT, CAROLINE(MD), QUEEN ANNES(M	$8,203
2	DE	UPPER NANTICOKE R	119,775	KENT, SUSSEX	$9,158
CODE TOTAL			277,375		
3	DE	MURDERKILL RIVER	70,000	KENT	$8,670
3	DE	ST. JONES RIVER	57,500	KENT	$8,670
CODE TOTAL			127,500		
	ST TOTAL		404,875		
1	FL	CANOE CREEK	46,000	ESCAMBIA	$8,554
1	FL	EAST PITTMAN CREE	17,600	HOLMES	$5,534
1	FL	WEST FORK COLDWAT	49,800	SANTA ROSA	$7,958
CODE TOTAL			113,400		
2	FL	POND CREEK	164,000	SANTA ROSA	$7,958
2	FL	SOUTH FLORIDA CON	32,608	PALM BEACH, HENDRY	$11,400
CODE TOTAL			196,608		
3	FL	RUSS MILL CREEK	37,250	JACKSON	$6,369
3	FL	UPPER SHOAL RIVER	79,560	WALTON	$5,728
CODE TOTAL			116,810		
	ST TOTAL		426,818		
1	GA	BEAVER CREEK	26,070	MACON	$6,628
1	GA	CASON BRANCH-DUHA	57,000	JEFFERSON, GLASCOCK	$6,915
1	GA	SHOAL CREEK	48,640	MARION	$4,859
1	GA	TESNATEE CREEK	45,194	LUMPKIN, WHITE	$6,116
CODE TOTAL			176,904		
2	GA	UPPER MULBERRY RI	61,481	BARROW, GWINNETT, HALL, JACKSON	$8,255
2	GA	SOQUE	84,055	HABERSHAM	$6,733
2	GA	SOUTH FORK OF BRO	92,990	CLARKE, MADISON, OGLETHORPE	$7,045
2	GA	CEDAR CREEK	34,465	COWETA, FULTON	$10,504
2	GA	ELI WHITNEY	119,437	CHATHAM, EFFINGHAM	$8,535
2	GA	EUHARLEE CREEK	108,919	BARTOW, FLOYD, HARALSON, PAULDING	$7,881
2	GA	GROVE RIVER	55,600	BANKS, JACKSON	$6,241
2	GA	HEAD OF LITTLE TE	36,693	RABUN, MACON(NC)	$6,537
2	GA	HUDSON RIVER	126,510	BANKS, FRANKLIN, MADISON	$6,215
2	GA	LITTLE CREEK	82,579	WHEELER, LAURENS	$6,441
2	GA	LITTLE SANDY CREE	27,276	CLARKE, JACKSON, MADISON	$7,457
2	GA	LOWER LITTLE TALL	133,218	CARROLL, HARALSON, HEARD	$7,734
2	GA	MIDDLE FORK BROAD	50,829	BANKS, FRANKLIN, HABERSHAM, STEPH	$6,581
2	GA	MIDDLE OCONEE-WAL	91,700	HALL, JACKSON	$8,116
2	GA	MILL BRANCH	21,319	BACON	$6,703

C D E	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
2	GA	NORTH OCONEE RIVE	57,345	HALL, JACKSON	$8,116
2	GA	PINE LOG TRIBUTAR	83,900	BARTOW, CHEROKEE, GORDON	$7,459
2	GA	SALLACOA CREEK AR	76,600	BARTOW, CHEROKEE, PICKENS, GORDON	$7,430
2	GA	BEAVERDAM CREEK	68,149	ELBERT, FRANKLIN, HART	$7,169
2	GA	BIG CEDAR CREEK	133,205	POLK, FLOYD	$7,982
2	GA	BIG CREEK	66,952	CHEROKEE, FORSYTH, FULTON	$8,633
CODE TOTAL			1,613,222		
3	GA	HORSE CREEK	100,600	TELFAIR, DODGE	$7,367
3	GA	LITTLE RIVER	146,200	TIFT, TURNER, WORTH, COLQUITT	$7,206
CODE TOTAL			246,800		
ST TOTAL			2,036,926		
2	HI	HONOLUA	24,800	MAUI	$9,701
2	HI	KAHALUU	4,420	HONOLULU	$11,554
2	HI	WAILUKA-ALENAIO	167,000	HAWAII	$8,726
2	HI	WAIMANALO	6,132	HONOLULU	$11,554
CODE TOTAL			202,352		
3	HI	LAHAINA	4,920	MAUI	$9,701
3	HI	WAIMEA-PAAUILO AG	172,400	HAWAII	$8,726
CODE TOTAL			177,320		
ST TOTAL			379,672		
1	IA	A&T LONG BRANCH	16,680	TAYLOR, ADAMS	$8,380
1	IA	HACKLEBARNEY	44,250	MONTGOMERY, ADAMS	$9,933
CODE TOTAL			60,930		
2	IA	INDIAN CREEK-VAN	47,200	VAN BUREN, CLARK(MO)	$7,837
2	IA	LEDGEWOOD CREEK	7,500	FREMONT	$10,303
2	IA	LITTLE RIVER	63,400	DECATUR	$6,936
2	IA	MILL-PICAYUNE CRE	62,994	CRAWFORD, HARRISON, SHELBY	$9,788
2	IA	MORLEE	8,770	FRANKLIN	$10,330
2	IA	MOSQUITO OF HARRI	24,510	HARRISON, SHELBY	$9,716
2	IA	NORTH PIGEON	4,510	POTTAWATTAMIE	$9,863
2	IA	SIMON RUN	4,150	POTTAWATTAMIE	$9,863
2	IA	THREE MILE CREEK	37,320	ADAIR, UNION	$9,264
2	IA	TROUBLESOME CREEK	83,100	AUDUBON, CASS, GUTHRIE	$9,686
2	IA	TURKEY CREEK	86,121	ADAIR, AUDUBON, CASS, GUTHRIE	$9,568
2	IA	TWELVE MILE CREEK	50,030	ADAIR, RINGGOLD, UNION	$8,956
2	IA	TWIN PONIES	21,640	POTTAWATTAMIE, MILLS	$9,736
2	IA	WAUBONSIE CREEK	29,510	MILLS, FREMONT	$9,956
2	IA	BACON CREEK	14,895	PLYMOUTH, WOODBURY	$10,047
2	IA	BADGER CREEK	34,346	DALLAS, MADISON, WARREN	$9,480
2	IA	BLOCKTON	18,720	RINGGOLD, TAYLOR	$8,173
CODE TOTAL			598,716		
3	IA	LONG BRANCH	20,030	ANDUBON, SHELBY	$9,746
3	IA	ROSS	10,100	PLYMOUTH	$9,378
3	IA	SOAP CREEK	162,000	APPANOOSE, DAVIS, MONROE, WAPELLO	$8,821
CODE TOTAL			192,130		
ST TOTAL			851,776		
1	ID	HAZELTON BUTTE	14,700	JEROME	$9,180
1	ID	LOWER SAND CREEK	47,950	BENNEVILLE, BINGHAM	$8,299
1	ID	ROCK CREEK-BIG CA	53,500	POWER	$8,888
1	ID	ROCK CREEK-HOUTZ/	67,750	POWER	$8,888
1	ID	ROCK CREEK-ROY EA	30,912	POWER	$8,888
1	ID	ROCK CREEK-SUBLET	36,200	POWER	$8,888
1	ID	ROCK CREEK-SUMMIT	31,000	POWER, ONEIDA	$8,166

C D E	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
1	ID	TENSED/LOLO	22,000	BENEWAH	$9,172
1	ID	THORN CREEK	21,080	LATAH, WHITMAN(WA)	$8,896
1	ID	UPPER SAND CREEK	56,140	BONNEVILLE	$9,269
CODE TOTAL			381,232		
2	ID	MONTPELIER CREEK	51,600	BEAR LAKE	$8,404
2	ID	BRUNDAGE	44,107	ADAMS	$8,952
CODE TOTAL			95,707		
3	ID	PARIS CREEK	25,400	BEAR LAKE	$8,404
3	ID	TAMMANY CREEK	25,344	NEZ PERCE	$10,198
3	ID	UPPER LITTLE MALA	64,400	ONEIDA	$7,446
CODE TOTAL			115,144		
ST TOTAL			592,083		
1	IL	ASH-LOOP	8,500	ST. CLAIR	$9,352
1	IL	KINKAID LAKE	42,340	JACKSON	$7,875
1	IL	LICK CREEK	88,400	SANGAMON, MORGAN	$11,196
1	IL	RACCOON LAKE	30,720	MARION, JEFFERSON	$9,073
1	IL	SPRING LAKE	12,966	MCDONOUGH	$8,072
CODE TOTAL			182,926		
2	IL	UPPER SALT CREEK	33,280	COOK, DU PAGE, LAKE	$13,053
2	IL	LITTLE CACHE CREE	45,000	JOHNSON	$5,889
2	IL	LITTLE CALUMET RI	136,500	COOK, WILL	$11,406
2	IL	MILL CREEK	81,840	CLARK, EDGAR	$9,688
CODE TOTAL			296,620		
3	IL	LAKE MATTOON	34,900	COLES, CUMBERLAND, SHELBY	$8,165
3	IL	LONG LAKE WATERSH	27,000	LAKE	$13,102
3	IL	LOWER DES PLAINES	243,700	LAKE, COOK, WILL, DUPAGE	$12,350
CODE TOTAL			305,600		
ST TOTAL			785,146		
1	IN	BRUCE LAKE	4,083	FULTON, PULASKI	$8,799
1	IN	MARIAH CREEK	58,850	KNOX, SILLIVAN	$9,017
CODE TOTAL			62,933		
2	IN	MIDDLE FORK OF AN	69,400	CRAWFORD, PERRY	$6,656
2	IN	MUDDY FORK OF SIL	42,642	CLARK, FLOYD, WASHINGTON	$8,235
2	IN	STUCKER FORK	117,850	CLARK, JEFFERSON, SCOTT, WASHINGT	$7,715
2	IN	TWIN-RUSH CREEK	28,099	WASHINGTON	$6,430
2	IN	UPPER BIG BLUE RI	124,000	HENRY, RUSH	$8,440
2	IN	JORDAN CREEK	35,123	WARREN	$7,958
2	IN	LITTLE WALNUT CRE	41,225	PARKE, PUTNAM	$7,897
2	IN	ANDERSON RIVER	97,174	PERRY, SPENCER, DUBOIS, CRAWFORD	$7,692
2	IN	BACHELOR RUN	23,519	CARROLL, HOWARD	$10,154
2	IN	BAILEY-COX-NEWTSO	12,070	STARKE	$6,921
CODE TOTAL			591,102		
3	IN	PIGEON CREEK	29,140	STEUBEN	$8,441
3	IN	PORTER COUNTY-KAN	151,570	PORTER, LAPORTE, LAKE	$10,120
3	IN	WEST GOSHEN	3,600	ELKHART	$9,786
CODE TOTAL			184,310		
ST TOTAL			838,345		

CDE	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
1	KS	SOUTH FORK	184,550	BUTLER, CHASE, GREENWOOD	$9,723
CODE TOTAL			184,550		
2	KS	SOUTH SECTOR UPPE	63,494	BUTLER	$10,933
2	KS	SPILLMAN CREEK	119,360	LINCOLN, MITCHELL, OSBORNE, RUSSE	$10,010
2	KS	TIMBER CREEK	101,700	BUTLER, COWLEY	$10,305
2	KS	TURKEY CREEK	107,226	DICKINSON, MARION	$8,762
2	KS	UPPER BLACK VERMI	54,886	MARSHALL, NEMAHA	$8,725
2	KS	UPPER SALT CREEK	201,990	LINCOLN, MITCHELL	$9,406
2	KS	UPPER WAKARUSA	234,944	OSAGE, SHAWNEE, DOUGLAS, WABAUNSE	$9,182
2	KS	WEST SECTOR WHITE	174,960	SEDGWICK, HARVEY, BUTLER	$10,954
2	KS	WET WALNUT NO. 1	145,292	BARTON, RUSH	$11,725
2	KS	WET WALNUT NO. 2	232,219	NESS, PAWNEE, RUSH	$10,576
2	KS	WET WALNUT NO. 3	228,568	NESS	$10,240
2	KS	BIG CREEK	84,100	COFFEY, GREENWOOD, LYON, WOODSON	$9,535
2	KS	CROSS CREEK	113,786	JACKSON, POTTAWATOMIE, SHAWNEE	$9,112
2	KS	DIAMOND CREEK	104,070	MORRIS, CHASE	$7,855
2	KS	DRY CREEK	15,232	CLAY, CLOUD, REPUBLIC, WASHINGTON	$8,724
2	KS	EAST SECTOR WHITE	153,000	BUTLER, HARVEY, MARION	$9,660
2	KS	ELK CREEK	89,036	ATCHISON, JACKSON, NEMAHA	$8,135
2	KS	GRANT-SHANGHAI CR	25,200	CHAUTAUQUA	$7,652
2	KS	GRASSHOPPER-COAL	61,440	ATCHISON, BROWN, JEFFERSON	$8,360
2	KS	LOWER ELK RIVER	130,440	ELK, CHAUTAUQUA, WILSON	$7,811
2	KS	LOWER SALT CREEK	91,955	LINCOLN, MITCHELL, OTTAWA	$9,211
2	KS	LYONS CREEK	179,776	DICKINSON, GEARY, MARION, MORRIS	$8,745
2	KS	MIDDLE CREEK (LIN	44,691	LINN, MIAMI	$8,845
2	KS	MIDDLE CREEK (MOR	72,211	MORRIS, MARION, CHASE	$8,054
2	KS	MIDDLE WALNUT	188,947	BUTLER, COWLEY, SUMNER, SEDGWICK	$10,608
2	KS	NORTH BLACK VERMI	104,416	MARSHALL, NEMAHA	$8,725
2	KS	NORTH SECTOR UPPE	218,506	BUTLER, CHASE	$9,515
2	KS	PEYTON CREEK	24,288	CHASE	$8,096
2	KS	SAND CREEK	64,134	HARVEY, MARION	$9,023
CODE TOTAL			3,429,867		
3	KS	PONY CREEK (NEBRA	38,915	BROWN, NEMAHA, RICHARDSON(NE)	$8,492
3	KS	ROY'S CREEK	28,518	BROWN	$8,427
3	KS	WOLF RIVER	160,516	ATCHISON, BROWN, DONIPHAN	$8,268
CODE TOTAL			227,949		
ST TOTAL			3,842,366		
1	KY	CANOE CREEK	76,643	HENDERSON	$10,060
1	KY	LITTLE AND MIDDLE	36,400	GREEN, TAYLOR	$6,974
1	KY	PIGEON ROOST CREE	5,180	JACKSON	$4,546
CODE TOTAL			118,223		
2	KY	RED LICK CREEK	44,660	ESTILL, JACKSON, MADISON	$5,951
2	KY	SHORT CREEK	24,300	GRAYSON	$6,611
2	KY	STEWART CREEK	5,000	HOPKINS	$10,040
2	KY	UPPER TRADEWATER	60,000	CHRISTIAN, HOPKINS	$8,848
2	KY	WEST FORK OF MAYF	48,000	CARLISLE, GRAVES	$7,936
2	KY	WEST FORK OF POND	52,900	CHRISTIAN, HOPKINS	$8,845
2	KY	NORTH FORK NOLIN	34,610	LARUE	$7,184
2	KY	OBION CREEK	206,108	CARLISLE, FULTON, GRAVES, HICKMAN	$7,882
2	KY	DONALDSON CREEK	47,010	CALDWELL, CRITTENDEN	$8,178
2	KY	EAST FORK OF POND	139,700	CHRISTIAN, MUHLENBERG, TODD	$7,746
2	KY	FOX CREEK	50,400	FLEMING	$6,114
2	KY	BIG MUDDY CREEK	65,140	BUTLER, LOGAN	$7,207
2	KY	CANEY CREEK	97,310	BUTLER, GRAYSON, OHIO	$6,796
CODE TOTAL			875,138		
3	KY	BRASHEARS CREEK	171,000	SHELBY, SPENCER, HENRY	$8,050
3	KY	EAST AND MIDDLE M	19,130	MCCRACKEN	$9,475

CDE	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
3	KY	FALL CREEK	30,100	WAYNE	$5,134
3	KY	HIGHLAND CREEK	104,400	UNION, HENDERSON, WEBSTER	$9,711
3	KY	SOUTH FORK LITTLE	42,800	CHRISTIAN	$7,650
CODE TOTAL			367,430		
ST TOTAL			1,360,791		
1	LA	AVOYELLES-ST. LAN	219,400	AVOYELLES, RAPIDES, ST. LANDRY	$6,878
1	LA	BAYOU MALLET	108,000	ACADIA, EVANGELINE, ST. LANDRY	$7,261
1	LA	CHATLIN LAKE CANA	99,500	RAPIDES, AVOYELLES	$6,714
1	LA	COCODRIE-GRAND LO	132,000	EVANGELINE, ST. LANDRY	$6,876
1	LA	FIFTH WARD	28,900	ACADIA	$8,031
CODE TOTAL			587,800		
2	LA	LAKE VERRET	246,000	ASCENSION, ASSUMPTION, IBERVILLE	$8,390
2	LA	WALNUT-ROUNDAWAY	227,700	MADISON, EAST CARROLL	$5,278
2	LA	WEST CARROLL	248,900	RICHLAND, WEST CARROLL	$6,084
2	LA	CYPRESS-BLACK BAY	148,500	BOSSIER	$8,273
2	LA	EAST CARROLL	223,700	EAST CARROLL, MADISON	$5,279
2	LA	EAST FRANKLIN	196,000	FRANKLIN, RICHLAND, CATAHOULA	$6,044
2	LA	CHOCTAW BAYOU	110,000	WEST BATON ROUGE, POINTE COUPEE,	$8,261
2	LA	BAYOU PLAQUEMINE	234,400	ACADIA, ST. LANDRY	$7,619
2	LA	BELL CITY	61,000	CALCASIEU, CAMERON, JEFFERSON DAV	$7,873
2	LA	CAMERON-CREOLE	113,000	CAMERON	$9,945
2	LA	CENTRAL MADISON	97,200	MADISON	$4,675
2	LA	BAYOU BONNE IDEE	157,500	MOREHOUSE	$6,992
2	LA	BAYOU GROSSE TETE	137,000	POINTE COUPEE PARISH	$7,589
CODE TOTAL			2,200,900		
3	LA	BAYOU PENCHANT-LA	211,500	LAFOURCHE	$9,411
3	LA	BUNDICK CREEK	207,400	ALLEN, BEAUREGARD, VERNON	$6,468
3	LA	MILL HAVEN	32,000	OUACHITA	$8,117
3	LA	UPPER VERMILION B	107,600	IBERIA, LAFAYETTE, ST. MARTIN	$10,614
3	LA	WEST FORK BAYOU L	133,900	LAFOURCHE	$9,411
3	LA	WEST FRANKLIN	244,700	FRANKLIN, RICHLAND	$6,066
CODE TOTAL			937,100		
ST TOTAL			3,725,800		
2	MA	BAITING BROOK	2,182	MIDDLESEX	$12,936
2	MA	CLAM RIVER	20,065	BERKSHIRE	$9,978
2	MA	SU-AS-CO	241,617	MIDDLESEX, WORCESTER	$11,339
2	MA	UPPER QUABOAG RIV	94,301	HAMPDEN, HAMPSHIRE, WORCESTER	$9,445
2	MA	WASHINGTON MOUNTA	5,740	BERKSHIRE	$9,978
CODE TOTAL			363,905		
3	MA	COBB BROOK	1,700	BRISTOL	$9,046
CODE TOTAL			1,700		
ST TOTAL			365,605		
1	MD	SENECA CREEK	82,479	MONTGOMERY	$16,966
CODE TOTAL			82,479		
2	MD	ST. MARY'S RIVER	20,000	ST MARYS	$7,433
2	MD	UPPER CHESTER RIV	90,500	KENT, QUEEN ANNE'S, KENT(DE), NEW	$9,482
2	MD	GOLDSBORO	9,250	CAROLINE	$7,929
CODE TOTAL			119,750		

CDE	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
3	MD	FORGE BRANCH	13,500	CAROLINE	$7,929
3	MD	WEST AND RHODE RI	16,300	ANNE ARUNDEL	$11,093
CODE TOTAL			29,800		
	ST TOTAL		232,029		
1	ME	DICKEY BROOK	16,195	AROOSTOOK	$7,819
1	ME	LOVEJOY POND	7,993	KENNEBEC	$8,722
1	ME	PARKHURST SIDING-	3,820	AROOSTOOK	$7,819
1	ME	PATTEE BROOK	8,000	AROOSTOOK	$7,819
1	ME	PERLEY BROOK	13,030	AROOSTOOK	$7,819
1	ME	SEBASTICOOK LAKE	81,060	PENOBSCOT, SOMERSET	$7,799
1	ME	WEBBER POND	17,664	KENNEBEC	$8,722
CODE TOTAL			147,762		
2	ME	PRESQUE ISLE STRE	124,000	AROOSTOOK	$7,819
CODE TOTAL			124,000		
3	ME	KENDUSKEAG STREAM	137,600	PENOBSCOT	$8,218
CODE TOTAL			137,600		
	ST TOTAL		409,362		
1	MI	BEAN CREEK	129,920	HILLSDALE, LENAWEE	$9,007
1	MI	BEAR RIVER	81,000	CHARLEVIOX, EMMET	$8,866
1	MI	BLACK CREEK	17,300	OTTAWA, ALLEGAN	$8,932
CODE TOTAL			228,220		
2	MI	EAST BRANCH STURG	83,980	DICKINSON	$9,752
2	MI	EAST UPPER MAPLE	169,730	GRATIOT, SHIAWASSEE, CLINTON	$9,522
2	MI	MIDDLE BRANCH OF	48,672	SANILAC	$8,240
2	MI	ROGUE RIVER	155,760	OTTAWA, NEWAYGO, KENT, MONTCALM,	$9,032
2	MI	WEST UPPER MAPLE	25,730	GRATIOT, CLINTON	$9,498
CODE TOTAL			483,872		
3	MI	ELK RIVER	162,730	ANTRIM, CHARLEVOIX	$8,435
3	MI	SOUTH BRANCH KAWK	66,588	BAY, MIDLAND, SAGINAW	$10,429
CODE TOTAL			229,318		
	ST TOTAL		941,410		
2	MN	BURNHAM CREEK	104,200	POLK	$10,208
2	MN	CANBY CREEK	20,150	LINCOLN, YELLOW MEDICINE	$8,730
2	MN	COON CREEK	55,276	ANOKA	$10,768
2	MN	SOUTH ZUMBRO	200,540	DODGE, OLMSTEAD	$10,492
CODE TOTAL			380,166		
3	MN	KANARANZI-LITTLE	198,400	NOBLES, ROCK	$10,983
3	MN	LAZARUS CREEK	66,010	LAC QUI PARLE, YELLOW MEDICINE, D	$9,962
3	MN	SNAKE RIVER	52,500	MARSHALL, PENNINGTON, POLK	$10,443
CODE TOTAL			316,910		
	ST TOTAL		697,076		
1	MO	BIG CREEK-HURRICA	176,800	CARROLL, LIVINGSTON	$10,098
1	MO	LITTLE WYACONDA-S	98,958	CLARK, SCOTLAND, LEWIS	$8,253
1	MO	WEST FORK OF BIG	187,290	DAVIESS, HARRISON, RINGGOLD(IA),	$7,564
CODE TOTAL			463,048		
2	MO	WILLOW CREEK	17,170	RAY	$8,231
2	MO	LOST CREEK	39,100	NEWTON	$6,993
2	MO	LOWER LITTLE BLAC	124,390	BUTLER, RIPLEY, CLAY (AR)	$7,257

CDE	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
2	MO	MOZINGO CREEK	23,988	NODAWAY	$8,272
2	MO	SOUTH FORK OF BLA	65,579	JOHNSON	$7,128
2	MO	TROUBLESOME CREEK	89,300	LEWIS, MARION, KNOX	$8,552
2	MO	UPPER LITTLE BLAC	124,749	BUTLER, RIPLEY, CARTER	$5,129
2	MO	EAST FORK OF BIG	52,084	HARRISON, DECATUR(IA)	$7,820
2	MO	GRASSY CREEK	35,600	LEWIS, MARION	$8,405
2	MO	GRINDSTONE-LOST-M	209,100	CLINTON, DAVIESS, DEKALB, GENTRY	$7,795
CODE TOTAL			781,060		
3	MO	EAST LOCUST CREEK	79,875	PUTNAM, SULLIVAN	$7,231
3	MO	EAST YELLOW CREEK	110,482	SULLIVAN, LINN, CHARITAN, MACON	$8,490
3	MO	MIDDLE FORK OF SA	225,730	MONROE, SHELBY, RANDOLPH, MACON	$8,282
3	MO	MISSISSIPPI COUNT	99,600	MISSISSIPPI	$6,759
3	MO	MONITEAU CREEK	95,802	BOONE, HOWARD, RANDOLPH	$8,230
3	MO	UPPER LOCUST CREE	231,000	PUTNAM, SULLIVAN, WAYNE(IA), APPA	$7,231
CODE TOTAL			842,489		
ST TOTAL			2,086,597		
1	MS	BAYOU PIERRE	241,229	COPIAH, LINCOLN	$6,584
1	MS	BOX CREEK	28,900	HOLMES	$5,098
1	MS	BROWNS CREEKS	94,300	PRENTISS, ITAWAMBA, TISHOMINGO	$6,713
1	MS	FOURTEEN MILE-BAK	162,700	HINDS	$10,723
1	MS	HOULKA CREEK	146,805	CHICKASAW, CLAY, PONTOTOC	$6,714
1	MS	MANTACHIE, BOGUE	113,585	ITAWAMBA, LEE, MONROE	$7,454
1	MS	OKATOMA CREEK	179,205	SIMPSON, SMITH, COVINGTON, JONES,	$6,917
1	MS	WHITESAND-GREENS	131,260	JEFFERSON DAVIS, LAWRENCE	$5,740
CODE TOTAL			1,097,984		
2	MS	RICHLAND CREEK	93,000	RANKIN	$7,659
2	MS	SECOND CREEK	69,056	ADAMS	$8,488
2	MS	SHUQUALAK CREEK	21,610	NOXUBEE, KEMPER	$5,161
2	MS	SOWASHEE CREEK	52,910	LAUDERDALE	$8,367
2	MS	STANDING PINE CRE	36,648	LEAKE, NESHOBA	$6,445
2	MS	TALLAHAGA CREEK	79,320	WINSTON, CHOCTAW, NESHOBA	$6,112
2	MS	TOWN CREEK	246,957	LEE, PONTOTOC, PRENTISS, UNION	$7,116
2	MS	TUSCUMBIA RIVER	223,146	ALCORN, PRENTISS, MCNAIRY(TN)	$6,977
2	MS	UPPER LEAF RIVER	131,580	SMITH, SCOTT	$6,252
2	MS	MUDDY CREEK	80,795	TIPPAH, HARDEMAN(TN)	$6,965
2	MS	LINE CREEK	127,360	CLAY, CHICKASAW, WEBSTER	$6,958
2	MS	LONG CREEK	40,306	ATTALA	$5,674
2	MS	HOLLIDAY CREEK	63,760	MARION, JEFFERSON DAVIS	$5,986
2	MS	CHUNKY RIVER	240,650	NEWTON, NESHOBA	$6,929
2	MS	CHUQUATONCHEE CRE	136,849	CHICKASAW, CLAY, MONROE, PONTOTOC	$6,844
2	MS	COPIAH CREEK	126,358	COPIAH	$6,430
2	MS	DRY CREEK	13,954	COVINGTON	$6,430
2	MS	BEARTOWN	690	PIKE	$6,469
2	MS	BIG CREEK	80,012	JASPER, JONES, SMITH	$7,145
2	MS	BAHALA CREEK	32,340	LINCOLN, COPIAH, LAWRENCE	$6,337
CODE TOTAL			1,897,301		
3	MS	SOUTH DELTA	167,665	HUMPHREYS, SHARKEY, YAZOO	$6,525
CODE TOTAL			167,665		
ST TOTAL			3,162,950		
1	MT	BOULDER RIVER	223,600	JEFFERSON	$7,835
1	MT	MILL CREEK	8,100	PARK	$8,267
1	MT	MUDDY CREEK(NORTH	10,000	TETON	$9,841
1	MT	SAGE CREEK	246,000	LIBERTY	$13,560
CODE TOTAL			487,700		

CDE	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
2	MT	WOLF CREEK	159,600	FERGUS, JUDITH BASIN	$7,991
2	MT	LOWER BIRCH CREEK	244,000	PONDERA	$9,908
CODE TOTAL			403,600		
3	MT	PASTURE CREEK	10,950	MCCONE	$10,293
CODE TOTAL			10,950		
	ST TOTAL		902,250		
1	NC	BUFFALO-MUDDY FOR	73,630	CLEVELAND, GASTON, LINCOLN	$8,226
1	NC	FISHING CREEK	30,380	GRANVILLE	$6,861
1	NC	LITTLE CONTENTNEA	115,155	PITT, GREENE, WILSON, EDGECOMBE	$8,714
1	NC	RAMSEUR RESERVOIR	38,434	RANDOLPH	$8,466
1	NC	SWAN QUARTER	11,440	HYDE	$7,296
CODE TOTAL			269,039		
2	NC	TOWN FORK CREEK	84,521	STOKES, FORSYTH	$9,107
2	NC	SANDY CREEK	9,600	CUMBERLAND	$7,405
2	NC	SECOND BROAD RIVE	144,300	MCDOWELL, RUTHERFORD, CLEVELAND	$7,790
2	NC	STEWARTS CREEK-LO	72,000	SURRY, CARROLL(VA)	$8,111
2	NC	LITTLE YADKIN RIV	40,000	STOKES, FORSYTH, SURRY	$8,775
2	NC	MUDDY CREEK (DUPL	31,000	DUPLIN	$7,604
2	NC	LIMESTONE CREEK	41,000	DUPLIN	$7,604
2	NC	COUNTRY LINE CREE	88,773	CASWELL, ROCKINGHAM	$7,025
2	NC	CRABTREE CREEK	90,750	DURHAM, WAKE	$10,359
2	NC	DUTCHMAN CREEK	81,500	DAVIE, IREDELL, YADKIN	$8,257
CODE TOTAL			683,444		
3	NC	BIG AND DOUBLE CR	48,500	STOKES, SURRY	$7,655
3	NC	INDIAN, HOWARDS,	84,700	LINCOLN, GASTON, CATAWBA	$8,716
3	NC	LANES CREEK	80,595	UNION, ANSON	$7,350
3	NC	RICHARDSON CREEK	174,458	UNION, ANSON	$7,350
3	NC	UPPER CONTENTNEA	122,200	NASH, WILSON, JOHNSTON, WAKE, FRA	$8,980
CODE TOTAL			510,453		
	ST TOTAL		1,462,936		
1	ND	ENGLISH COULEE	73,665	GRAND FORKS	$8,891
1	ND	MUSKRAT LAKE BASI	19,910	MOUNTRAIL	$10,408
1	ND	STARKWEATHER	246,477	CAVALIER, RAMSEY	$11,041
CODE TOTAL			340,052		
2	ND	UPPER TURTLE RIVE	157,825	GRAND FORKS, NELSON	$10,004
2	ND	SQUARE BUTTE CREE	191,699	OLIVER, MORTON	$9,148
2	ND	LOWER FOREST RIVE	192,385	WALSH	$10,241
2	ND	MIDDLE BRANCH-PAR	105,600	CAVALIER, PEMBINA, WALSH	$11,000
2	ND	MIDDLE-SOUTH BRAN	219,520	GRAND FORKS, NELSON, WALSH	$10,083
CODE TOTAL			867,029		
3	ND	BELFIELD	30,150	STARK, BILLINGS	$10,861
3	ND	SHELL LAKE	36,000	MOUNTRAIL	$10,408
CODE TOTAL			66,150		
	ST TOTAL		1,273,231		
1	NE	BALLS BRANCH	18,366	THAYER, JEFFERSON	$9,082
1	NE	BONE CREEK	46,120	BUTLER	$9,522
1	NE	MIDDLE FORK MAPLE	48,350	COLFAX, STANTON	$9,256
1	NE	STEVENS-CALLAHAN(	46,482	CASS, LANCASTER	$9,962
CODE TOTAL			159,318		
2	NE	SWAN CREEK	152,300	JEFFERSON, SALINE	$10,438
2	NE	TEKAMAH-MUD CREEK	19,080	BURT	$9,990

C D E	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
2	NE	UPPER BIG NEMAHA	114,980	GAGE, JOHNSON, LANCASTER, OTOE	$9,702
2	NE	UPPER MEDICINE CR	219,140	FRONTIER, HAYES, LINCOLN	$9,013
2	NE	WILSON CREEK	77,900	CASS, OTOE	$9,713
2	NE	WOLF-WILDCAT CREE	55,960	GAGE, PAWNEE	$9,434
2	NE	PAPILLION CREEK	245,800	DOUGLAS, SARPY, WASHINGTON	$10,239
2	NE	SOUTH BRANCH LITT	126,720	LANCASTER, OTOE, JOHNSON	$9,568
2	NE	SOUTH FORK	31,110	PAWNEE, RICHARDSON	$8,821
2	NE	CLEAR CREEK	54,820	SAUNDERS	$9,783
2	NE	COTTONWOOD CREEK	34,144	SAUNDERS	$9,783
2	NE	GERING VALLEY	57,600	SCOTTS BLUFF	$10,033
2	NE	LONG BRANCH	46,905	RICHARDSON, NEMAHA, PAWNEE, JOHNS	$8,914
2	NE	LOWER MEDICINE CR	152,700	FRONTIER, LINCOLN	$9,893
2	NE	BELLWOOD	51,300	BUTLER	$9,522
2	NE	BIG INDIAN CREEK	131,700	GAGE, JEFFERSON	$10,064
2	NE	BLACKWOOD CREEK	187,700	LINCOLN, HITCHCOCK, HAYES, RED WI	$9,334
2	NE	AOWA CREEK	55,350	DIXON	$8,668
CODE TOTAL			1,815,209		
3	NE	CALLAHAN CREEK	50,990	CASS, SAUNDERS, LANCASTER	$9,902
3	NE	EAST-WEST-DRY MAP	200,070	COLFAX, DODGE, CUMING, STANTON	$9,973
3	NE	LOWER LITTLE NEMA	169,275	OTOE,NEMAHA, RICHARDSON, JOHNSON	$9,181
3	NE	MIDDLE BIG NEMAHA	131,045	JOHNSON, GAGE, PAWNEE	$9,138
3	NE	SKULL CREEK	72,550	BUTLER, SAUNDERS	$9,652
3	NE	SOAP CREEK (GAGE)	24,700	GAGE	$10,103
3	NE	SQUAW-CAMP CREEK	53,240	OTOE, NEMAHA	$9,646
3	NE	TURKEY CREEK (KS)	175,706	JOHNSON, PAWNEE, MARSHALL(KS), NE	$8,656
3	NE	UPPER LITTLE NEMA	123,520	LANCASTER, OTOE, CASS	$9,918
CODE TOTAL			1,001,096		
ST TOTAL			2,975,623		
2	NH	BAKER RIVER	136,900	GRAFTON	$9,442
2	NH	DEAD RIVER	10,350	COOS	$8,288
2	NH	SUGAR RIVER	176,000	GRAFTON, MERRIMACK, SULLIVAN	$9,510
CODE TOTAL			323,250		
ST TOTAL			323,250		
1	NJ	CLOVE BROOK	12,700	SUSSEX	$10,762
1	NJ	NAVESINK CREEK	60,000	MONMOUTH	$12,200
1	NJ	UPPER SALEM RIVER	64,000	SALEM	$9,098
CODE TOTAL			136,700		
2	NJ	FURNACE BROOK	4,968	WARREN	$10,578
2	NJ	ASSUNPINK CREEK	58,300	MERCER, MONMOUTH	$12,143
CODE TOTAL			63,268		
3	NJ	CROSSWICKS/BLACKS	127,694	MONMOUTH, MERCER, BURLINGTON, OCE	$11,045
3	NJ	LOWER PEQUEST FLO	102,400	WARREN, SUSSEX	$10,670
CODE TOTAL			230,094		
ST TOTAL			430,062		
1	NM	EAGLE-TUMBLEWEED	184,400	CHAVES, EDDY	$8,444
1	NM	ESPANOLA-RIO CHAM	27,520	RIO ARRIBA, SANDOVAL	$5,784
1	NM	ZUNI PUEBLO	12,786	MCKINLEY	$6,169
CODE TOTAL			224,706		
2	NM	SEBASTIAN MARTIN-	103,040	RIO ARRIBA	$6,272
2	NM	SIBLEY, GREEN, JA	120,875	DONA ANA, SIERRA	$7,626
2	NM	T OR C WILLIAMSBU	19,050	SIERRA	$8,017
2	NM	CORRALES	54,720	SANDOVAL, BERNALILLO	$7,596

C D E	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
2	NM	COTTONWOOD-WALNUT	228,326	CHAVES, EDDY	$8,444
2	NM	CROW & BROAD CANY	137,932	DONA ANA, SIERRA	$7,626
CODE TOTAL			663,943		
ST TOTAL			888,649		
3	NV	EAST WALKER	14,820	LYON	$9,590
CODE TOTAL			14,820		
ST TOTAL			14,820		
1	NY	BLIND BROOK (CT)	6,980	WESTCHESTER, FAIRFIELD (CT)	$15,944
1	NY	BRANDYWINE CREEK	750	BROOME	$10,112
1	NY	OTISCO LAKE	23,844	ONONDAGA	$10,324
CODE TOTAL			31,574		
2	NY	CONEWANGO CREEK	190,080	CATTARAUGUS, CHAUTAUQUA	$8,215
2	NY	CROMLINE CREEK	13,920	ORANGE	$9,516
2	NY	DEPOSIT CREEK	48,437	BROOME, DELAWARE, CHENANAGO	$8,633
2	NY	FLINT CREEK	64,860	ONTARIO, STEUBEN, YATES	$8,966
2	NY	HIGINBOTHAM BROOK	1,030	MADISON	$8,134
2	NY	ISCHUA CREEK	74,900	CATTARAUGUS	$7,574
2	NY	MILL BROOK	2,960	CHENANGO	$7,826
2	NY	NANTICOKE CREEK	73,000	BROOME, TIOGA	$9,362
2	NY	NEWTOWN-HOFFMAN C	54,600	SCHUYLER, CHEMUNG	$8,641
2	NY	OAK ORCHARD CREEK	39,860	GENESEE, ORLEANS	$9,346
2	NY	BATAVIA KILL	47,180	GREENE	$8,221
CODE TOTAL			610,827		
3	NY	CAYADUTTA CREEK	38,601	FULTON, MONTGOMERY	$8,505
3	NY	DYKE CREEK	46,350	ALLEGANY	$7,032
3	NY	ONTARIO WATERSHED	108,553	ONTARIO, YATES	$8,926
3	NY	VIRGIL CREEK	25,996	TOMPKINS, CORTLAND	$8,193
CODE TOTAL			219,500		
ST TOTAL			861,901		
1	OH	EAST BRANCH OF SU	18,250	TUSCARAWAS, HOLMES	$7,572
1	OH	PRAIRIE-HOAGLIN B	67,840	PAULDING, VAN WERT	$9,346
1	OH	UPPER KILLBUCK CR	198,400	WAYNE, MEDINA	$9,805
CODE TOTAL			284,490		
2	OH	RATTLESNAKE CREEK	177,280	FAYETTE, HIGHLAND, CLINTON, GREEN	$8,302
2	OH	RUSH CREEK	151,462	FAIRFIELD, HOCKING, PERRY	$7,898
2	OH	SHORT CREEK	81,280	HARRISON, JEFFERSON	$9,002
2	OH	SOUTH FORK LICKIN	180,364	LICKING, PERRY, FAIRFIELD	$8,467
2	OH	LITTLE AUGLAIZE R	125,440	MERCER, PUTNAM, PAULDING, VAN WER	$9,057
2	OH	MIDDLE BRANCH OF	65,920	PAULDING, VAN WERT	$9,346
2	OH	NORTH HOCKING RIV	68,670	FAIR FIELD	$9,593
2	OH	PINE CREEK	117,800	JACKSON, LAWRENCE, SCIOTO	$7,019
CODE TOTAL			968,216		
3	OH	KINGS CREEK	27,770	CHAMPAIGN, LOGAN	$8,687
3	OH	UPPER MAD RIVER	39,100	LOGAN	$9,530
3	OH	WILLS CREEK	185,600	BELMONT, GUERNSEY, MONROE, MUSKIN	$8,304
CODE TOTAL			252,470		
ST TOTAL			1,505,176		

CDE	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
1	OK	TURKEY CREEK	244,006	GARFIELD, ALFALFA, MAJOR, KINCFIS	$10,306
1	OK	UPPER BLUE RIVER	203,100	ATOKA, BRYAN, JOHNSTON, MURRAY, P	$7,770
1	OK	CAMBELL CREEK	41,120	KINFISHER	$10,960
1	OK	CARNEY CREEK	16,403	CHOCTAW	$5,767
1	OK	DEER CREEK	221,730	BLAINE, CADDO, CUSTER, DEWEY	$9,120
1	OK	DRY CREEK	115,740	LINCOLN	$8,006
1	OK	GARRISON CREEK	21,521	SEQUOYAH	$6,269
1	OK	POTT-SEM-TURKEY	34,560	SEMINOLE, PATTAWATOMIE	$9,168
CODE TOTAL			898,180		
2	OK	PRYOR CREEK	175,488	MAYES, ROGERS, CRAIG	$8,663
2	OK	QUAPAW CREEK	98,560	LINCOLN, POTTAWATOMIE	$8,557
2	OK	ROBINSON CREEK	40,320	LINCOLN	$8,006
2	OK	SALT-CAMP CREEK	73,030	CREEK, LINCOLN	$8,363
2	OK	SANDY CREEK	147,243	GARVIN, PONTOTOC	$9,057
2	OK	STILLWATER CREEK	177,216	LOGAN, NOBLE, PAYNE	$8,045
2	OK	TRI-COUNTY TURKEY	196,400	HARMON, GREER, JACKSON	$7,379
2	OK	HOYLE CREEK	36,768	MAJOR	$9,222
2	OK	JACK CREEK	45,709	TILLMAN, COMANCHE	$8,050
2	OK	KICKAPOO NATIONS	165,300	LINCOLN, OKLAHOMA	$10,550
2	OK	LEADER-MIDDLE CLE	107,968	COAL, PONTOTOC	$7,604
2	OK	LOST-DUCK CREEKS	55,040	KAY	$12,236
2	OK	LOWER BAYOU	95,488	CARTER, LOVE	$9,228
2	OK	LOWER BLACK BEAR	157,683	PAWNEE, PAYNE, NOBLE	$8,250
2	OK	LOWER CLEAR BOGGY	240,301	ATOKA, BRYAN, COAL, JOHNSTON	$5,893
2	OK	LOWER RED ROCK CR	116,582	NOBLE, PAWNEE	$8,906
2	OK	MCKINNEY BUZZARD	15,980	MCCURTAIN	$6,243
2	OK	OKFUSKEE TRIBUTAR	201,575	OKFUSKEE, OKMULGEE, CREEK	$7,867
2	OK	COTTON-COON-MISSI	198,170	WASHINGTON, OSAGE, NOWATA, CHAUTA	$9,459
2	OK	COW CREEK	123,494	JEFFERSON, STEPHENS	$9,843
2	OK	CANE CREEK	101,755	MUSKOGEE, OKMULGEE	$8,657
2	OK	CANEY CREEK	30,541	ATOKA, BRYAN	$5,944
2	OK	BRUSHY-PEACEABLE	212,192	LATIMER, PITTSBURG	$6,687
2	OK	UPPER ELK CREEK	248,340	BECKHAM, KIOWA, WASHITA	$8,367
2	OK	UPPER MUDDY BOGGY	207,674	COAL, HUGHES, PITTSBURG, PONTOTOC	$7,391
2	OK	UPPER RED ROCK CR	197,376	GARFIELD, GRANT, KAY, NOBLE	$11,220
2	OK	WATERFALL-GILFORD	43,410	MCCURTAIN	$6,243
2	OK	UPPER BAYOU	119,680	CARTER, LOVE	$9,228
2	OK	UPPER BLACK BEAR	241,546	GARFIELD, NOBLE, PAWNEE	$9,706
CODE TOTAL			3,870,829		
3	OK	BIG BEAVER CREEK	197,870	COTTON, COMANCHE, STEPHENS	$8,736
3	OK	BOIS D'ARC-COWSKI	80,300	KAY	$12,236
3	OK	LITTLE BEAVER CRE	125,440	STEPHENS, COTTON, GRADY, COMANCHE	$8,725
3	OK	LUGERT-ALTUS	46,878	JACKSON, GREER	$7,548
3	OK	NORTH DEER CREEK	60,320	CLEVELAND, OKLAHOMA, POTTAWATOMIE	$10,449
3	OK	SANS BOIS CREEK	205,000	HASKELL, LATIMER, PITTSBURG	$6,679
CODE TOTAL			715,808		
ST TOTAL			5,484,817		
1	OR	CALAPOOYA CREEK	157,300	DOUGLAS	$8,645
1	OR	DRY CREEK	32,300	GILLIAM, MORROW	$10,629
1	OR	MT. HOOD IRRIGATI	1,880	HOOD RIVER	$10,818
1	OR	NORTH SIDE BIG NE	1,090	TILLAMOOK	$9,206
CODE TOTAL			192,570		
2	OR	WOLF CREEK	106,240	UNION	$8,338
2	OR	NORTH POWDER RIVE	117,800	BAKER	$8,330
2	OR	GRAND PRAIRIF	23,100	LINN	$8,740

CDE	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
2	OR	JUNIPER CANYON	13,403	CROOK	$8,788
2	OR	LOWER AMAZON & FL	60,230	BENTON, LANE	$8,901
CODE TOTAL			320,773		
ST TOTAL			513,343		
1	PA	BUFFALO CREEK	85,760	UNION	$8,221
1	PA	CEDAR RUN WATERSH	9,600	CLINTON, CENTRE	$7,964
1	PA	CLOVER CREEK	33,280	BLAIR	$8,241
1	PA	NESCOPECK CREEK	50,880	LUZERNE	$9,081
1	PA	ROCK CREEK	40,000	ADAMS	$8,520
1	PA	UPPER TIOGA RIVER	99,500	TIOGA, BRADFORD	$7,424
CODE TOTAL			319,020		
2	PA	NESHAMINY CREEK	149,000	BUCKS, MONTGOMERY	$12,834
2	PA	CROSS CREEK	35,000	WASHINGTON	$9,741
2	PA	DUNLAP CREEK	11,038	FAYETTE	$7,956
2	PA	GREENE-DREHER	47,810	MONROE, PIKE, WAYNE	$8,205
2	PA	JACOBS CREEK	62,500	FAYETTE, WESTMORELAND	$8,857
2	PA	LITTLE SCHUYLKILL	86,848	CARBON, BERKS, SCHUYLKILL	$9,498
2	PA	LITTLE SHENANGO R	72,738	CRAWFORD, MERCER	$8,941
2	PA	MIDDLE CREEK	84,096	MIFFLIN, SNYDER, UNION	$7,978
2	PA	BRANDYWINE CREEK	211,200	CHESTER, DELAWARE, LANCASTER, NEW	$11,555
2	PA	BRIAR CREEK	9,344	COLUMBIA, LUZERNE	$8,480
2	PA	BRODHEAD CREEK	18,624	MONROE, PIKE	$8,239
CODE TOTAL			788,198		
ST TOTAL			1,107,218		
1	PR	GUAYANES RIVER	31,700	YABUCOA MUNICIPALITY	$1,420
CODE TOTAL			31,700		
2	PR	ANASCO RIVER	129,128	ADJUNTAS, ANASCO, LARES, LAS MARI	$2,126
CODE TOTAL			129,128		
ST TOTAL			160,828		

NOTE: Latest per capita income available is for 1979.

CDE	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
1	RI	AQUIDNECK ISLAND	24,100	NEWPORT	$10,215
CODE TOTAL			24,100		
ST TOTAL			24,100		
1	SC	BUSH RIVER-BEAVER	94,480	LAURENS, NEWBERRY	$8,156
1	SC	CARTWHEEL COMMUNI	19,300	HORRY	$7,806
1	SC	FAIRFOREST CREEK	155,600	SPARTANBURG, UNION	$7,759
1	SC	NORTHEAST CALHOUN	78,000	CALHOUN	$7,852
1	SC	NORTHWEST CHEROKE	200,800	CHEROKEE(SC), CLEVELAND(NC), RUTH	$7,764
1	SC	PACOLET RIVER	49,120	SPARTANBURG	$8,639
1	SC	RAFTING CREEK	39,835	LEE, SUMTER	$6,140
1	SC	SALEM COMMINUTY	33,640	FLORENCE	$7,666
1	SC	SALKEHATCHIE RIVE	148,600	BARNWELL	$7,531
1	SC	UPPER SAVANNAR WA	181,500	ABBEVILLE, ANNDERSON	$7,351
1	SC	WALLACE WATERSHED	70,950	MARLBORO(SC), RICHMOND(NC)	$6,237
CODE TOTAL			1,071,825		
2	SC	SOUTH TYGER RIVER	38,147	GREENVILLE	$9,557
2	SC	UPPER NEW RIVER	138,500	BEAUFORT, JASPER	$7,607
2	SC	ROCKY CREEK	126,300	CHESTER, FAIRFIELD	$7,689
2	SC	RABON CREEK	85,500	GREENVILLE, LAVRENS	$8,685
2	SC	OOLENOY RIVER	34,000	PICKENS	$7,340
2	SC	HOLLOW CREEK	12,900	LEXINGTON, SALUDA	$7,510

C D E	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
2	SC	LITTLE LYNCHES CR	85,272	KERSHAW, LANCASTER	$7,913
2	SC	LITTLE RIVER	80,400	LAURENS	$7,813
2	SC	NORTH TYGER RIVER	21,700	SPARTANBURG	$8,639
2	SC	CLARKS FORK-BULLO	77,500	YORK, CLEVELAND(NC)	$8,295
2	SC	CANE CREEK	94,721	LANCASTER, UNION(NC)	$7,916
2	SC	BACK SWAMP	11,754	LEE	$5,410
CODE TOTAL			806,694		
3	SC	LITTLE SALUDA RIV	159,602	SALUDA	$6,694
3	SC	NORTH FORK EDISTO	243,442	LEXINGTON, ORANGEBURG, CALHOUN	$7,633
3	SC	THOMPSON-WESTFIEL	240,580	CHESTERFIELD, ANSON(NC)	$7,114
3	SC	WEST ORANGEBURG W	154,700	ORANGEBURG, AIKEN	$7,963
CODE TOTAL			798,324		
ST TOTAL			2,676,843		
2	SD	UNION CREEK	30,300	UNION	$10,130
CODE TOTAL			30,300		
3	SD	TURKEY-CLAY CREEK	162,700	CLAY, HUTCHINSON, TURNER, YANKTON	$8,600
CODE TOTAL			162,700		
ST TOTAL			193,000		
1	TN	MADISON-CYPRESS C	14,530	MADISON	$8,129
1	TN	PORTLAND WATERSHE	1,920	SUMNER	$7,910
CODE TOTAL			16,450		
2	TN	RED BOILING SPRIN	9,650	CLAY, MACON	$6,204
2	TN	REELFOOT-INDIAN C	82,660	OBION, FULTON(KY)	$8,617
2	TN	SWEETWATER CREEK	37,640	LOUDON, MCMINN, MONROE	$6,850
2	TN	WEATHERFORD-BEAR	32,775	WAYNE	$5,723
2	TN	MARTIN CREEK	10,700	CARROLL, HENRY	$7,683
2	TN	MCNAIRY-CYPRESS C	109,600	MCNAIRY	$6,419
2	TN	MIDDLE FORK-OBION	75,605	HENRY, WEAKLEY	$7,161
2	TN	MUD CREEK	48,000	WEAKLEY, OBION	$7,551
2	TN	NORTH FORK-FORKED	80,190	GIBSON	$7,183
2	TN	PINE CREEK	16,800	SCOTT	$5,546
2	TN	PORTERS CREEK	44,600	HARDEMAN, BENTON(MS), TIPPAH(MS)	$6,258
2	TN	BEAR CREEK	31,500	FAYETTE, HARDEMAN, HAYWOOD	$5,956
2	TN	BOGOTA	11,500	DYER, OBION	$8,178
2	TN	CANE CREEK	57,000	LAUDERDALE	$6,305
2	TN	CROW CREEK	101,500	FRANKLIN, MARION, JACKSON(AL)	$6,847
2	TN	HURRICANE CREEK	52,780	DICKSON, HUMPHREYS	$7,506
CODE TOTAL			802,500		
3	TN	BEANS CREEK	53,760	FRANKLIN, LINCOLN	$6,748
3	TN	SPRING CREEK	61,700	WEAKLEY, HENRY, CARROLL	$7,265
3	TN	WHITE OAK CREEK	125,000	CHESTER, HADDIN, HENDERSON, MCNAI	$6,108
CODE TOTAL			240,460		
ST TOTAL			1,059,410		
1	TX	CADDO CREEK	134,400	COLLIN, HOUNT	$9,813
1	TX	ECLETO CREEK	170,880	GUADALUPE, WILSON, KARNES, DEWITT	$7,970
1	TX	ELM CREEK (1250)	238,253	RUNNELS, TAYLOR	$10,272
1	TX	LOS OLMOS CREEK	204,470	STARR, JIM HOGG	$6,399
1	TX	RED DEER CREEK	211,840	GRAY, HEMPHILL, ROBERTS	$11,581
CODE TOTAL			959,843		
2	TX	RUSH CREEK	188,160	COMANCHE, BROWN, EASTLAND	$8,592
2	TX	SALADO CREEK	139,808	BEXAR	$9,452
2	TX	SAN DIEGO-ROSITA	222,450	DUVAL, JIM WELLS	$8,342

C D E	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
2	TX	SANDERSON CANYON	138,240	TERRELL, PECOS, BREWSTER	$9,063
2	TX	TEHUACANA CREEK	196,480	HILL, LIMESTONE, MCLENNAN	$8,609
2	TX	THREE MILE AND SU	95,360	CULBERSON, HUDSPETH	$9,652
2	TX	UPPER LAKE FORK C	145,472	HOPKINS, HUNT, RAINS	$8,382
2	TX	UPPER SAN MARCOS	60,780	HAYS, COMAL	$8,917
2	TX	WEST FORK OF BUFF	7,640	JOHNSON	$9,580
2	TX	LOWER PLUM CREEK	152,900	CALDWELL, HAYS	$7,621
2	TX	MCCLELLAN CREEK	222,422	CARSON, GRAY, DONLEY	$10,964
2	TX	MILL CREEK	81,280	VAN ZANDT	$8,081
2	TX	NORTH CUERO	12,608	DEWITT	$8,736
2	TX	PALUXY RIVER	249,920	ERATH, HOOD, SOMERVELL	$9,542
2	TX	PECAN CREEK	19,200	HAMILTON	$8,110
2	TX	PINE CREEK	119,040	LAMAR	$8,090
2	TX	PLUM CREEK	97,000	CALDWELL, HAYS, TRAVIS	$8,765
2	TX	POLLARD CREEK	7,260	PALO PINTO	$9,096
2	TX	HITSON, C&L AND W	200,000	HUDSPETH	$10,804
2	TX	LEONA RIVER	110,080	UVALDE	$7,506
2	TX	ELM CREEK (CEN-TE	207,360	BELL, FALLS, MCLENNAN, MILAM	$8,954
2	TX	CANEY CREEK	46,784	FANNIN, GRAYSON	$8,808
2	TX	CHOCTAW CREEK	168,000	GRAYSON	$9,558
2	TX	CORNUDAS, NORTH A	177,600	HUDSPETH, OTERO(NM)	$9,344
2	TX	CUMMINS CREEK	204,896	AUSTIN, COLORADO, FAYETTE, LEE	$7,379
2	TX	DONAHOE CREEK	98,285	BELL, MILAM, WILLIAMSON	$8,981
2	TX	AQUILLA-HACKBERRY	188,160	HILL, JOHNSON	$8,992
2	TX	ATTOYAC BAYOU	213,440	NACOGDOCHES, RUSK, SAN AUGUSTINE,	$8,025
2	TX	BIG CREEK	26,240	BRAZOS	$8,013
CODE TOTAL			3,796,865		
3	TX	BIG CREEK (DELTA	22,140	DELTA	$7,887
3	TX	BIG CREEK (TRI-CO	227,800	MCLENNAN, FALLS, LIMESTONE	$8,516
3	TX	HUDSPETH COUNTY C	18,342	HUDSPETH	$10,804
3	TX	LOWER AQUILLA-HAC	74,500	HILL, MCLENNAN	$8,948
3	TX	SULPHUR CREEK	101,748	LIVE OAK, BEE, KARNES	$8,463
CODE TOTAL			444,530		
	ST TOTAL		5,201,238		
2	UT	BLUE CREEK-HOWELL	115,500	BOX ELDER	$8,817
2	UT	DRY GULCH-MARTIN	7,625	DUCHESNE, UINTAH	$8,805
2	UT	FERRON	191,000	EMERY, SANPETE	$6,405
2	UT	HANSEL VALLEY	76,200	BOX ELDER	$8,817
2	UT	WARNER DRAW	190,500	WASHINGTON	$6,494
CODE TOTAL			580,825		
3	UT	DRY GULCH-CLASS K	13,851	DUCHESNE, UINTAH	$8,805
3	UT	DRY GULCH-HANCOCK	18,960	DUCHESNE, UINTAH	$8,805
3	UT	DRY GULCH-T.H. DO	1,987	DUCHENSNE, UINTAH	$8,805
3	UT	SAND WASH LAND TR	21,000	DUCHESNE	$8,548
CODE TOTAL			55,798		
	ST TOTAL		636,623		
1	VA	LOONEY-MILL CREEK	19,500	BOTETOURT	$7,489
1	VA	SOUTH FORK ROANOK	88,480	FLOYD, MONTGOMERY, ROANOKE	$7,229
1	VA	UPPER APPOMATTOX	200,826	APPOMATTOX, BUCKINGHAM, CUMBERLAN	$6,235
1	VA	COPPER CREEK	85,300	RUSSELL, SCOTT	$6,727
CODE TOTAL			394,106		
2	VA	GREAT CREEK	29,754	BRUNSWICK, LUNENBURG	$6,398
2	VA	LITTLE RIVER	30,500	LOUISA	$7,215
2	VA	BUFFALO RIVER	60,500	AMHERST	$6,901
2	VA	BUSH RIVER	98,772	PRINCE EDWARD	$6,715
2	VA	CEDAR RUN	65,517	FAUQUIER	$9,807

CDE	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
2	VA	UPPER CLINCH VALL	36,846	TAZEWELL	$8,783
2	VA	POHICK CREEK	22,690	FAIRFAX	$14,750
2	VA	SLATE RIVER	98,730	BUCKINGHAM	$5,663
2	VA	SOUTH ANNA RIVER	234,000	ALBEMARLE, HANOVER, LOUISA	$8,943
CODE TOTAL			677,309		
3	VA	CRIPPLE CREEK	79,560	SMYTH, WYTHE	$6,988
3	VA	HAYS CREEK	49,000	ROCKBRIDGE, AUGUSTA	$6,905
3	VA	PAMUNKEY RIVER	107,000	KING WILLIAM	$8,555
3	VA	WATKINS BRANCH	2,202	BUCHANAN	$9,066
CODE TOTAL			237,762		
ST TOTAL			1,309,177		
1	VT	BLACK RIVER	85,800	ORLEANS, LAMOILLE	$7,572
1	VT	LAPLATTE RIVER	36,740	CHITTENDEN	$9,707
1	VT	LEMON FAIR RIVER	56,800	ADDISON, RUTLAND	$8,367
1	VT	LOWER OTTER AND D	67,600	ADDISON	$7,827
1	VT	LOWER WINOOSKI RI	142,200	CHITTENDEN, ADDISON	$8,764
CODE TOTAL			389,140		
2	VT	UPPER CASTLETON R	20,500	RUTLAND	$8,907
CODE TOTAL			20,500		
3	VT	BARTON AND CLYDE	189,380	CALEDONIA, ESSEX, ORLEANS	$7,099
3	VT	LOWER LAMOILLE RI	249,200	CHITTENDEN, LAMOILLE, FRANKLIN	$8,647
3	VT	LOWER MISSISQUOI	247,000	FRANKLIN	$7,932
CODE TOTAL			685,580		
ST TOTAL			1,095,220		
1	WA	EAST WENATCHEE	5,860	DOUGLAS	$8,147
1	WA	JOHNSON CREEK	13,450	WHATCOM	$9,449
1	WA	NEWAUKUM	18,660	KING	$13,675
1	WA	NORTH PINE-SPRING	29,959	SPOKANE	$9,835
1	WA	PLEASANT VALLEY C	28,609	WHITMAN	$9,166
1	WA	REBEL FLAT CREEK	50,940	WHITMAN	$9,166
CODE TOTAL			147,478		
2	WA	WEST SIDE GREEN R	29,025	KING	$13,675
2	WA	MARSHLAND	14,006	SNOHOMISH	$9,756
2	WA	EAST SIDE GREEN R	73,090	KING	$13,675
CODE TOTAL			116,121		
3	WA	PATAHA CREEK	121,912	GARFIELD, COLUMBIA	$15,245
3	WA	TUCANNON RIVER	202,732	COLUMBIA	$14,859
CODE TOTAL			324,644		
ST TOTAL			588,243		
1	WI	UPPER SUGAR RIVER	110,940	DANE	$11,298
1	WI	UPPER WEST BRANCH	49,436	IOWA, GRANT, LAFAYETTE	$8,435
CODE TOTAL			160,376		
2	WI	WEST FORK KICKAPO	64,170	MONROE, VERNON	$8,295
2	WI	BAD AXE	132,000	VERNON	$7,788
2	WI	GLEN HILLS	36,000	DUNN, ST. CROIX	$8,044
2	WI	MAIDEN ROCK COULE	865	PIERCE	$8,332
2	WI	OTTER CREEK	135,680	IOWA	$8,016
2	WI	PINE RIVER	159,200	RICHLAND, VERNON	$7,821
2	WI	PLAIN-HONEY CREEK	45,500	SAUK	$9,015
CODE TOTAL			573,415		

C D E	ST	WATERSHED NAME	ACRES	COUNTY NAME	PER CAPITA INCOME
3	WI	RICHLAND CREEK	30,905	GREEN, STEPHENSON(IL)	$10,444
CODE TOTAL			30,905		
	ST TOTAL		764,696		
1	WV	OPEQUON	215,680	BERKELEY, JEFFERSON, FREDERICK(VA	$7,994
1	WV	LITTLE WHITESTICK	9,295	RALEIGH	$8,575
1	WV	MIDDLE GRAVE CREE	18,900	MARSHALL	$8,079
CODE TOTAL			243,875		
2	WV	MILL CREEK	123,250	JACKSON, ROANE	$7,797
2	WV	BRUSH CREEK	22,293	MERCER	$8,295
2	WV	ELK TWOMILE CREEK	8,450	KANAWHA	$10,751
2	WV	HARMON CREEK	24,350	BROOKE, HANCOCK, WASHINGTON(PA)	$10,004
2	WV	PINEY CREEK-SOAK	3,690	RALEIGH	$8,575
2	WV	POCATALICO RIVER	231,000	ROANE, KANAWA, PUTNAM, JACKSON	$8,689
2	WV	POND RUN	4,430	WOOD	$9,626
2	WV	UPPER BUFFALO CRE	45,914	MARION	$8,854
2	WV	UPPER MUD RIVER	61,590	LINCOLN, BOONE	$6,851
2	WV	WHEELING CREEK	191,180	OHIO, MARSHALL, GREENE(PA), WASHI	$8,968
CODE TOTAL			716,147		
3	WV	HOWARD CREEK	58,300	GREENBRIER	$7,021
3	WV	INDIAN CREEK	26,230	MONROE	$6,114
3	WV	TETER CREEK	34,200	BARBOUR	$7,092
CODE TOTAL			118,730		
	ST TOTAL		1,078,752		
1	WY	DOUGLAS	37,100	CONVERSE	$11,227
CODE TOTAL			37,100		
	ST TOTAL		37,100		
FINAL TOTALS			61,177,810		

710 RECORDS TOTALED

RIVER BASIN SURVEYS

Question: According to the President's proposed budget, termination of the Soil Conservation Service River Basin Surveys would be accomplished in fiscal year 1988. Sixty river basin studies and 73 flood plain management studies would be turned over to the states or local governments. The $8.3 million budget estimate for fiscal year 1988 comprises the lump sum severance and other one-time payments required to terminate the program entirely.

With immediate termination of these surveys on the budget horizon, I am curious--has USDA formulated a breakdown of each of the ongoing surveys affected that shows what stage they are in?

Answer: No special breakdown has been made of the stages of ongoing surveys that would be terminated. We do list river basin surveys by those that are in the early stages of planning, without an approved plan of work (POW), and those which are ongoing studies with an approved POW.

Question: Please provide a list of these studies.

Answer: A list of these studies follows:

ONGOING COOPERATIVE RIVER BASIN STUDIES

(* = studies without an approved Plan of Work)

State		Study Name	Stream	Congress	Completion Date
AK		Alaska Rivers	Tanana,Copper	AK-All	8809
AK	*	Kuskokwim River	Kuskokwim R	AK-All	9109
AR		Arkansas Delta Basin	Yoconna-Spybuck	AR-1,2,4	8709
AR		AR Highlands Sty		AR-All	8909
AZ		Cent AZ Grdwater		AZ-1,2,3,5	8710
CA		CA Special Study		CA-All	8809
CO		Streambank Eros Sty	Arkansas,Missouri	CO-All	8809
DE		Coastal Sussex	Broadkill R	DE-1	8809
FL		Central FL WC		FL-4,5,6,10,12	8708
GA		Upper Chattahoochee	Chattahoochee R	GA-9	8609
GA		GA WP No 1	Piscola Cr	GA-1,2,3	8809
GA		WS Protection No.2	Meadow,Up Lott's	GA-1,3	8909
HI		Upcountry Maui		HA-2	8704
IA		Skunk River	Skunk R	IA-1,3,4,5,6	8709
IA		Western Iowa	Missour R Tribs	IA-5,6	9009
ID		ID Irrigation Sdy		ID-All	8709
ID		Special Erosion Sdy		ID-All	8809
ID		Raft River	Raft R	ID-2,UT-1	8806
IL		Hydrologic Unit		IL-All	8809
IN		Kankakee R Hydro		IN-1,3,5,7	8707
IN		NE IN Erosion	Eel,Lakes,Cedar	IN-3,4,5	8709
IN		E Central IN Eros		IN-2,4,5,6	8710
IN		SW-Cent IN Erosion		IN-5,6,7	8909
KS		NE KS Eros & Sed	U Delaware R	KS-1,2,3,5	8910
KY		KY Special Resources		KY-All	8603
KY		SE KY Special		KY-5,7	8709
LA		E Cent Barataria	Barataria,W Grand	LA-3,8	8810
MA		MA RB Plng Prog		MA-All	8509
MD		W Chesapeake Bay		MD-All	8709
ME		Aroostoock Erosion		ME-1	8612
MI		Saginaw Bay Area	Saginaw Bay	MI-8,10,11	8709
MI	*	NW Lower Mich		MI-9,10,11	9009
MN		Up Otter Tail River	Otter Tail R	MN-7	8709
MO		Up Salt River	Otter,Crooked	MO-6,9	8606
MO		Grand R,Three Forks	Grand,Three Fks	MO-6,IA-5	8910
MS		Pearl River	Pearl R	MS-1,2,3	8710

State	Study Name	Stream	Congress	Completion Date
MT	Gravity Sprinkler		MT-All	8609
MT *	Water Conservation		MT-All	8809
NC	Broad & Catawba R	Broad,Catawba	NC-3,4,7,8,9,1	8807
ND	Des Lacas-Souris R	Des Lacas-Souris	ND-All	8809
NE	Missouri R Hydro	Missouri R	NE-All	8509
NE	Sand Hills		NE-3	8709
NE *	WS Evaluation		NE-All	8909
NJ	Soil & Water Assessmnt	Wall,Paulins Kill	NJ-1,2,5,11-13	8909
NM	L Rio Grande River	L Rio Grande R	NM-2	8609
NM *	Hidalgo Y Luna		NM-2	8909
NY	Oriskany Creek	Kayaderosseras Cr	NY-24,25,27	8709
OH	Impact On Erosion		OH-All but 15	8709
OK	SW Erosion & Sediment		OK-3,4,6	8709
PA	Big Cove,Laural Hill	Big Cove,Laural	PA-9,12	8709
SC	SC Central Study		SC-2,3,4,5	8609
SC	West Piedmont Study	Santee,Savannah	SC-3,4	8803
SC *	Palmetto	Black,L Three Run	SC-All	8909
TN	West Eight Study		TN-7,8	8809
TX	Critical Fld & Eros		TX-14,15,17	8704
UT	Shambip River	Shambip R	UT-1	8609
UT	Upper Virgin River	Upper Virgin R	UT-1	8809
VA	SW Virginia Study	Laurel,Town Hill	VA-9	8809
VT	Flood,Erosion Sty	L Lake Champlain	VT-All	8809
WA	SE WA-Tucannon River	Tucannon,Pataha	WA-4,5	8706
WA	E High -Big Bend	Columbia R	WA-4,5	8709
WA	Puget Sound	Puget Sound	WA-1,2,6,7,8	8909
WI	Loess Hills Sdy	Isabeele Cr	WI-2,3	8712
WI	Groundwater Protect	Plover,Yellow	WI-7,8	8907
WV	Guyandotte River	Mud R,Buffalo Cr	WV-2,3	8710
WV	Little Kanawha River	Little Kanawha R	WV-1,3	8909
WY	Irrigation & WC	Platte,Bighorn	WY-All	8709

ONGOING FLOOD PLAIN MANAGEMENT STUDIES

(* = studies without an approved Plan of Work)

State	Study Name	Stream	Congress	Date
AK	Delta Junction	Tanana,Jarvis	AK-All	8612
AK	Delta Junction	Tanana,Jarvis	AK-All	8612
AL	Ardmore	Piney Cr	AL-3	8709
AZ	Kayenta	Chinle Wash	AZ-4	8711
AZ	Palominos-Miracle	San Pedro R	AZ-5	8609
CA	Reedley,Dinuba	Orange Grove	CA-15,17	8806
CO	Del Norte	Rio Grande R	CO-3	8807
CO	Greely	Lone Tree Cr	CO-4	8703
CO	Silt		CO-3	8605
CT	Conn Valley	Deep,Pattaconk	CT-All	8609
CT	Naugatuck Valley		CT-2,3,4,5	8709
CT	Woodbridge	West R	CT-3	8610
DE	Milford	Mispillion R	DE-1	8706
FL	Daytona Bch,Pt Orange	Tomoka,Spruce	FL-4,5,11	8512
FL	Gee,Soldier Creeks	Gee,Soldier Cr	FL-11	8801
FL	Lake Jessup	St John's R	FL-2	8809
FL	Monroe Basin	Monroe R	FL-5,10,11	8701
IL	Aurora	Blackberry,Lake	IL-14	8710
IL	Butterfield Creek	Butterfield Cr	IL-3,4	8607
IL	Downers,Glendale	E Br Du Page R	IL-1-13	8907
IL	DuQuoin	Six Mile Cr	IL-22	8803
IL	Galesburg	Henderson Cr	IL-17	8602
IL	Marion	U Craborchard Cr	IL-22	8809
IL	Recon Group 8		IL-14,17,18,	8609
IL	Reconn Group 9	Popular,Thorn	IL-1-13,18	8703
IL	Westhaven,Orland	Tinley Cr	IL-3,13	8609
IN	Jasper County	Carpenter,Curtis	IN-5	8509
IN	Terre Haute	Honey Cr	IN-7	8606
KY	Corbin	Lynn Camp Cr	KY-5,6	8709

State		Study Name	Stream	Congress	Date
LA		Bushley Creek	Bushley Cr	LA-5	8707
LA		DeRidder	Palmetto,Hickory	LA-4,7	8812
LA		Shreveport	Bickham Bayou	LA-4	8810
MA		Brockton	Salisbury Br	MA-11	8603
MA		Colrain	North,East Br	MA-1	8706
MA	*	Sawmill River			8909
ME		Bethal	Androscoggin R	ME-2	8609
ME		Houlton	Meduxekeag R	ME-1	8609
ME		St. Albans	Indian Stm	ME-1	8809
ME		Stockton Springs	Stower Mead,Main	ME-1	8804
MI		Cadillac	Clam R	MI-9	8704
MI		Coldwater	Coldwater,Sauk	MI-3,4	8710
MI		Mistequay Cr	Mistequay Cr	MI-7,8	8909
MO		Columbia	Perche-Hinkson	MO-6,9	8808
MO		Hermann	Frene Cr	MO-9	8803
MT		Chester	Cottwood Cr	MT-2	8806
MT		Wise,Dewey,Melrose	Big Hole R	MT-1	8612
NC		Brevard,Roseman	U French Broad R	NC-11	8704
NC		Dam Safety		NC-All	8809
NC		Winston-Salem	Muddy Cr	NC-6	8603
ND		Edgely	Maple R	ND-All	8612
ND		Killdeer	Spring Cr	ND-All	8609
ND		Mantador,Great Bend	Wild Rice R	ND-1	8907
NE		Amherst,Sumner	U Wood R	NE-1,3	8612
NE		Ashland,Wahoo	Wahoo Cr	NE-1,2	8807
NE		Grand Island	L Wood Cr	NE-1,3	8709
NE		Ogallala	S Platte R	NE-3	8909
NE		Wayne	S Logan Cr	NE-1	8509
NH		Belmont	Tioga,Winnipesaukee	NH-All	8609
NH		Dover,Rochester	Cocheco R	NH-1	8705
NJ		Paterson	Hackensack,Passiac	NJ-3,4,6,12	8609
NY		Johnson City		NY-25,28	8510
OH		Findlay	Blanchard R	OH-4	8706
OH		Glenford	Jonathan Cr	OH-10	8709
OH		Kenton	Up Scioto R	OH-4	8607
OH		Richwood	Fulton Cr	OH-7,12	8805
OH		Shelby,Johnson	Black Fk Mohican	OH-4,13	8509
OR		Newberg	Chehalem Cr	OR-1	8710
PA	*	Mill Creek			8909
RI		Burrillville	Pascoag Reservoir	RI-2	8712
RI		E Greenwich,Warwick	Maskerchugg R	RI-1,2	8603
RI		Lincoln,N Providence	Lincoln Downs Br	RI-1,2	8609
TN		Pegram	Turner Cr	TN-5,7	8609
TX		Madisonville	Town Branch	TX-18	8810
TX		San Saba City	San Saba R	TX-21	8810
VA		S Fk Shenandoah R	S Fk Shenandoah R	VA-6	8609
VT		Groton	Wells R	VT-All	8609
VT		Pittsfield	Tweed R	VT-All	8605
VT		Ryegate	Wells R	VT-All	8605
VT		Strafford,Thetford	Ompompanoosuc R	VT-All	8809
VT		Underhill	Browns R	VT-All	8511
WA		Almira	Wilson,Corbett	WA-5	8702
WI		Avoca,Pulaski	Morrey Cr	WI-2	8607
WI		Phillips	Elk R	WI-7,8	8607
WI		Poy Sippi	Pine,Willow	WI-6,8	8702
WV		Charles Town,Ranson	Flowing Sp,Evitts	WV-2	8609

PLANS TO TRANSFER RIVER BASIN STUDIES TO NON-FEDERAL AGENCIES

Question: Is there any plan for consultation with state and local governments such that they would be apprised by a certain date of the requirements of a project in their area in terms of manpower and financial resources?

Answer: No plan for consultation with state and local governments has been prepared. A plan for turning the ongoing studies over to these sponsors would not be developed until the termination is approved by the Congress. At that time, each of the studies and its manpower and financial requirements would be reviewed with the local sponsoring group.

Question: Will the state and local entities be able to come up with the necessary funding for these surveys within this fiscal year?

Answer: We have not evaluated the ability of sponsors to complete unfinished studies. Local sponsors do make a significant contribution to the support of river basin surveys and we feel that some of them have the capability to continue these studies.

Question: Has USDA received comments from state and local governments concerning these projects, and whether they would be willing or able to complete them?

Answer: No comments have been received from any state or local governments as to whether or not they would be willing or able to complete these studies.

WATERSHED AND FLOOD PREVENTION OPERATIONS

Question: The President's Budget proposes to decrease current appropriations for Watershed and Flood Prevention Operations by over $125 million in Fiscal Year 1988. This proposal would implement a design to close out programs for technical assistance and installation of Watershed improvement measures that reduce flood, sedimentation, and erosion damages and further conservation development. The President's Budget has included similar proposals that the Congress has rejected in recent years.

Under this program, the Federal Government provides funds for construction for structural measures for flood prevention and a share of the cost of installing works to improve agricultural water management, fish and wildlife. In addition, this program provides funding for small watershed construction projects and multipurpose projects. Would you have available for the Subcommittee, a chart listing the President's Budget request and the appropriations provided by the Congress for activities authorized under the Watershed and Flood Prevention Operations account over the past 10 fiscal years?

Answer: This information has been provided for the record.

[The Information Follows:]

SOIL CONSERVATION SERVICE
WATERSHED AND FLOOD PREVENTION OPERATIONS
(in thousands of dollars)

	BUDGET REQUEST				ACTUAL APPROPRIATIONS			
YEAR	PL-534 FLOOD PREVENTION	EMERGENCY WATERSHED PROTECTION	PL-566 SMALL WATERSHEDS	TOTAL BUDGET REQUESTS	PL-534 FLOOD PREVENTION	EMERGENCY WATERSHED PROTECTION	PL-566 SMALL WATERSHEDS	TOTAL APPROPRIATIONS
1979	20,876	10,000	121,646	152,522	23,500	10,000	136,107	169,607
1980	20,884	10,000	154,024	184,908	18,500	29,800	136,799	185,099
1981	19,860	10,000	142,300	172,160	23,500	10,000	159,024	192,524
1982	19,490	10,000	142,890	172,380	23,570	10,000	158,565	192,135
1983 a/	14,859	10,000	92,862	117,721	38,200	22,500	246,725	307,425
1984	15,179	0	81,414	96,593	23,200	22,000	150,000	195,200
1985	15,556	5,000	65,523	86,079	27,617	5,000	151,226	183,843
1986	11,714	1,179	49,738	62,631	33,881	79,732	143,859	257,472
1987 b/	12,400	1,106	54,272	67,778	26,271	14,755	134,859	175,885
1988	7,375	985	41,664	50,024	—	—	—	—

a/ Actual Appropriations include the 1983 Jobs Bill Supplemental as follows: $7.5 million for emergencies, $15.0 million for Flood Prevention and $85.0 million for Small Watersheds.

b/ Actual Appropriations to date include the $7.9 million transfer from Conservation Operations to Flood Prevention Operations.

WATERSHEDS FUNDING TRENDS

Question: Could you please tell the subcommittee what such a historic picture might look like.

Answer: Several general trends would be observed. The President's budget would always be less than the Congressional appropriation. The President's budget request would tend to be less than the previous year's budget request. Congressional appropriations would appear to be pretty much the same for each year if supplemental appropriations for the FY 1983 Jobs Bill and Emergency Watershed Protection Operations were excluded and the 1986 Gramm-Rudman-Hollings sequester was added back into the account.

PLANS FOR TERMINATING WATERSHED PROJECTS

Question: The fiscal year 1988 budget request provides a listing of subwatershed work plans and small watershed projects. Accordingly, out of over 1,800 projects underway, a majority are in some intermediate phase of construction or reconstruction. If the President's budget were enacted, what would become of these projects?

Answer: If the President's budget were to be enacted, planned program operations would continue through Fiscal Year 1987. Closeout operations would start in Fiscal Year 1988 with about $4.2 million being available for financial assistance. Only about 912 out of an estimated 1,833 projects would be affected by the program termination because the other projects would be completed, terminated some time ago or are inactive. The Soil Conservation Service would cease all planning, preconstruction and construction activities and the 912 projects would be turned over to the sponsors for completion or termination. It is estimated that local sponsors and state entities would complete about 60 of all projects in operation. Projects or components of projects that provide economic, social, and environmental benefits to local or regional entities, such as drainage, water supply, irrigation benefits and flood control, and those that protect and preserve the land resource base for future production would probably have a high priority for completion. The ability to fund these project measures would determine how many would be completed.

Question: Would you propose that expenses for their continuation be absorbed by state or local government?

Answer: We believe that the high priority projects should be continued and that most of the local sponsors would need State and local government assistance to do so. Of course, State and local governments would have to first determine the level of financial commitment they are willing to undertake and then they would have to decide if they could do so out of current revenues or if they would have to raise additional funds through borrowing or taxation.

Question: Have you inquired about the cost these legal entities would incur as a result of having these projects abruptly put in their hands?

Answer: The cost of implementing watershed and flood prevention projects would include the technical expertise needed to plan and install the projects as well as the construction costs. That cost would be about the same irrespective of Federal involvement. The total costs to complete all Public Law 83-566 and Public Law 78-534 projects authorized for installation is about $2,000,000,000. Approximately $600,000,000 of this amount is technical assistance currently provided by the SCS and $1,000,000,000 is federal cost share. The remaining $400,000,000 is local costs.

Question: Assuming that these projects were to be entirely discontinued because there were no other resources available, do you believe that our agricultural sector would suffer in any way?

Answer: The agricultural sector would lose benefits if all of these projects were discontinued, there were no other Federal, State or local programs available to provide similar benefits, and the sponsors were unable to proceed by themselves. At a minimum, this would leave the agricultural sector without the flood protection, water conservation, erosion control and sediment control provided by these projects.

Question: Frankly, I would like to know whether you believe these projects serve any useful purpose?

Answer: Every project that has been approved for installation provides quantifiable benefits equal to or greater than the cost of construction. A current evaluation of Watershed and Flood Prevention projects showed that the average ratio of benefits to cost for small watershed program projects is approximately 2.2:1. Protection from flooding is the single largest benefit, but the projects also conserve water, and control erosion and sedimentation. About 60% of all benefits are estimated to be received by crop and pasture and other agricultural facilities. An additional 26% of all benefits are estimated to accrue to rural communities. Projects with municipal and industrial water supply development as a purpose stimulate industrial growth using the available water supply.

In addition to providing conservation and economic benefits, the small watershed program has other social impacts. It has reduced the threat of loss of life; reduced health hazards by decreasing insect breeding pools, sewage overflows and chronic wet conditions; reduced disruption of necessary services such as police and fire protection; reduced pollution of drinking water; and reduced the disruption of utilities. Rural communities also may receive recreational benefits that result from watershed projects. For example, twenty-four projects that were studied provided a total of nearly 90,000 visitor days of incidental recreation use per year on single purpose flood control structures.

Other useful purposes that these projects serve are associated with broadening local interests because Federal funds have been used. The law requires that watershed project plans must be formulated and implemented to ensure the protection of such resources as fish and wildlife habitat, wild and scenic rivers, barrier islands, and historic and archaeological sites. Local sponsors must also agree to operate and maintain completed watershed measures with their own resources. The result is that environmental values that may be ignored are enhanced and, with few exceptions, sponsors maintain project measures in an excellent manner. This is largely due to their pride of ownership and recognition of the social and economic benefits they receive.

SWAMPBUSTER IN NORTH DAKOTA

Question: The Red River Valley of North Dakota has some of the world's most fertile farmland. It is as flat as this table and is dark, rich, and productive soil. The valley was formerly a lake bed and, consequently, during periods of heavy rain and snow, can be subject to flooding. I understand that the Soil Conservation Service looks at this fertile farmland as wetlands even though much, if not all, of the valley has been farmed for 100 years. My impression of the Swampbuster provisions is that they were to prevent the draining of existing swamps in order to permit that land to be farmed. We have been involved in sound soil and water management in North Dakota for decades. It was not my intention that this Swampbuster provision would become a nuisance for many farmers in my state. Apparently, some interests outside of agriculture are looking at this provision as a way of reclaiming wetlands. Don't you think that in interpreting the legislation sent to you by Congress, you are over zealous?

Answer: In an attempt to give our field offices guidance regarding normal circumstances for wetland determinations, we have developed the following directive. Wetlands that have been cropped 3 out of 5 years during the period 1981-85 can continue to be cropped without loss of eligibility to participate in USDA programs. Many of these nondepressional crop areas are underlain with hydric soils which is one of the two criteria used to identify wetlands. However, because of past cropping history, they can continue to be cropped. We are attempting to clarify this issue as we prepare final regulations.

SWAMPBUSTER REGULATIONS

Question: Farmers and engineers in North Dakota are concerned that the proposed rules for the "swampbuster" program do not include adequate protection for farmers who are involved in a drainage assessment district. Although districts that meet the requirements are exempt from the Act, the proposed rules apparently will allow an exemption only for ditches that were planned before the law took affect. Individual farm ditches connecting to the drainage district may not have been specifically included in the original plan. Farmers who start ditch work now, even though they are part of an exempt drainage district, would lose their program benefits. That doesn't seem fair. Has the Soil Conservation Service studied this problem and given any consideration to extending the exemption to farmers who were signed up for the drainage district before the law took affect.

Answer: The problem is being studied by the Department's four agencies that have responsibility for implementation: Soil Conservation Service (SCS), Agricultural Stabilization and Conservation Service (ASCS), Farmers Home Administration (FmHA), and the Federal Crop Insurance Corporation (FCIC). In fact, the Department has received many comments from the public concerning the interim rules on this subject. We are presently analyzing these comments in preparation for final rulemaking. The law clearly exempts drainage works commenced prior to December 23, 1985. Commenced means that earth moving for the purpose of draining the wetland was actually started, or the person applying for the benefits has legally and financially committed substantial funds by entering into a contract for the purpose of converting the wetland. We believe the intent of Congress was to protect the Nation's remaining wetlands and it is well known that North Dakota has some of the Nation's most significant wetlands for waterfowl.

QUESTIONS SUBMITTED BY SENATOR SASSER

WHY CUT CONSERVATION PROGRAMS?

Question: Mr. Scaling, in my home state of Tennessee, the Western part of our state has had some of the worst soil erosion problems in the country. Prior to 1979 the average loss of soil on cropland each year was 16 tons per acre. By implementing conservation programs designed by the Soil Conservation Service, we reduced our average erosion to less than 9 tons per acre each year. This erosion, however, is still twice the allowable average of 4 to 5 tons per acre established by Congress in the Food Security Act of 1985.

And now, Mr. Scaling, the Administration's budget would cut some $132.4 million from the Soil Conservation Service, one of our most successful Agriculture programs. There's an old saying that "if it ain't broke, don't fix it", and that is how I feel about our soil conservation programs. They are just beginning to show extremely positive results, why begin to cut them at this critical juncture?

Answer: We are very aware of the West Tennessee problems and the tremendous progress that has been made there in recent years. The SCS programs that have played the most important part in that progress are not being cut. The conservation technical assistance, soil surveys, and plant materials programs are all continued and at an increased level for soil surveys. Our priority will be on implementing the conservation provisions of the 1985 Food Security Act. Taking highly erodible cropland out of production under the conservation reserve program and requiring conservation systems on highly erodible land kept in production if a producer wishes to remain eligible for USDA farm programs, will enable us to zero in on our worst erosion problems in Tennessee and in the Nation as a whole. We will have to cut back on services elsewhere, but from an erosion control standpoint, we now have some new tools to help us continue the progress that we have seen in West Tennessee over the past few years. The reductions in the other programs such as watersheds and the Resource Conservation and Development programs are necessary due to fiscal pressures. Some programs must be reduced or eliminated if we are to meet our legal mandate to reduce the federal deficit while at the same time adequately funding our highest priority needs.

ESTIMATING CONSERVATION PROGRAM STAFFING NEEDS

Question: The National Assessment of Soil and Water Resources was not completed by the December 31, 1986 deadline this past year. Also the Department of Agriculture has been extremely slow in evaluation of Soil Conservation Service programs. Yet, the Department of Agriculture's budget calls for a reduction of over 4,000 staff years in the Soil Conservation Service next year alone.

How, without knowing the results of these critical surveys and evaluations, can you decide the amount of staff that will be needed to implement appropriate conservation programs?

Answer: National assessments and program evaluations are important and useful in the budgeting process. However, there are many other considerations that play as important or sometimes a more important role in making budget decisions such as those reflected in the FY 1988 budget.

General economic conditions and constraints such as the $108 billion deficit ceiling set in the Gramm-Rudman-Hollings legislation determine how much the total spending will be. Competing priority needs for Defense, Health, Transportation, Food Stamps, price supports and others determine what slice of the total spending pie can be allocated for soil and water conservation programs. New legislation, such as the Food Security Act further narrows the budget alternatives.

The assessments and program planning initiated under the Resource Conservation Act of 1977 are used for long-range planning and to identify and bring about needed changes in legislation and program emphasis over time. The 1985 Farm Bill, for example, incorporated many initiatives identified in the first assessment and planning cycle. Program evaluations are most useful in helping us to identify and correct any weaknesses in the way that we manage and carry out our programs. Neither of these processes address the questions raised in the annual budget process of "how much can we afford to spend" and "what should we spend it on" if we can't do everything." That decision must be made each year based on the overall budget situation.

We can assure you that the FY 1988 budget is not inconsistent with the upcoming National Assessment. Erosion continues to be our number one conservation problem and priority. Our budget proposal, by implementing the conservation provisions of the Food Security Act, zeroes in on our worst erosion problems. As we carry out whatever 1988 budget is appropriated to us, we will use all of the information that we have available,-- the new assessment, program plans, National Resource Inventories, and program evaluations,--to ensure that we do the best job possible of delivering our programs to the public.

RURAL ABANDONED MINE PROGRAM

Question: This Administration has made known its desire to end the Rural Abandoned Mine Program. Your budget calls for $500,000 for RAMP, a reduction of some $8.9 million below 1987 allocations.

My state of Tennessee receives no monies from the Office of Surface Mining to reclaim abandoned mines. We rely solely on the Secretary of Interior's discretionary funds and Interior's allocations to RAMP, and now you want to take that away from reclamation in Tennessee. Even more galling is that despite the lack of any Federal mine reclamation effort in Tennessee, the coal operators in Tennessee continue to pay into the Abandoned Mine Reclamation Fund. They paid in over $17 million through FY 1986. How can you justify to me this unbelievable reduction in RAMP, effectively taking away any reclamation funds from Tennessee, thereby eliminating any hope of protecting the land in these rural areas?

Answer: The budget request for the Rural Abandoned Mine Program, which is funded under the Interior Department's appropriation act, reflects the Administration's policy to rely on the state reclamation grants program as the primary delivery mechanism for reclamation services. It is our understanding that grant funds are made available to states contingent upon having an approved reclamation program. According to budget justification documents prepared by the Office of Surface Mining which administers the Abandoned Mine Reclamation Fund, there are presently 22 states with approved reclamation programs. If, or when, the State of Tennessee qualifies for these grants, the funds could be used to fund RAMP type projects at the discretion of the State.

Question: According to the Tennessee Surface Mining Committee, Tennessee has 46,000 acres of abandoned coal mined land. These sites are responsible for 4.6 million tons per year of soil loss into the rivers and streams. Only 258 acres of this land has been reclaimed under the Rural Abandoned Mine Program.

You have stated that we must attack the highly erodible land problem. Well, abandoned mine sites certainly fall into that category. Constant erosion from these sites affects not only the land, but also the groundwater supplies to these rural areas. By allowing these mine sites to go untreated, we are also allowing the erosion of these rural communities. Elimination of RAMP would destroy the chances of further development in these areas, and that is something I do not plan to allow to happen.

Mr. Scaling, don't you agree that eliminating RAMP would severely affect the chances of development in those rural communities faced with problems associated with abandoned mine sites?

Answer: The RAMP program has been administered in a manner that puts the highest priority on solving problems that pose a danger to human life. As you point out, for Tennessee, the actual lands reclaimed account for 258 acres of the 46,000 acres of abandoned mine lands in the state. The passage of the Water

Quality Act of 1987 will provide some opportunities for re-mining operations in some of these areas. Funds allocated for controlling nonpoint source pollution from mining sources and for addressing groundwater problems could be directed to this problem area. We are hopeful that the Environmental Protection Agency and appropriate elements of state government will adjust their programs accordingly to fill the void created by this reduction. In addition, the State of Tennessee could develop the capability for operating an approved reclamation program and qualify for state reclamation grants from the Department of Interior.

Question: The Administration has complained that RAMP is duplicative to other efforts by the Office of Surface Mining. While the Secretary of the Interior is authorized to grant 20% of the revenues of the Abandoned Mine Reclamation Fund, approximately $240 million each year, to RAMP, the program has received on the average $10 million each year, far below its effective capabilities.

RAMP has received approximately 4% of the funds which could be allotted for reclaiming abandoned mines. If the Soil Conservation Service were to emphasize RAMP to its full capabilities, wouldn't this compliment the efforts of soil conservation and groundwater protection programs rather than merely duplicate activities of the Office of Surface Mining? Why can't RAMP be used to meet a variety of needs beyond those of mine reclamation?

Answer: The purpose of the RAMP program, as established by law, is limited to the reclamation of abandoned coal mine lands. Work to reclaim these lands does result in soil conservation and water quality benefits. The emphasis placed on a particular program is, however, largely a question of priorities especially in light of the legislated mandate to reduce Federal spending. Funding decisions on the RAMP program are considered in the context of competing needs for funding other Department of Interior programs and all other Federal program requirements. Within USDA, we believe that the broader conservation initiatives authorized by the Food Security Act of 1985 will have a significant impact on erosion control and water quality improvement as highly erodible cropland is either put into the Conservation Reserve or cropped under approved conservation systems. The 1988 budget request places the highest priority on this work and represents the most effective allocation of limited SCS resources in terms of overall National conservation priorities and benefits.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

IMPACT OF CONSERVATION PROGRAM TERMINATIONS

Question: I realize the tremendous importance of the conservation provisions enacted in the Food Security Act and wholeheartedly support such efforts. However, I believe that it would be a grave mistake to completely abandon our traditional conservation activities by terminating all other ongoing programs of the Soil Conservation Service. Wouldn't you agree that the programs you are proposing to terminate have been essential to an overall responsible conservation effort throughout our nation?

Answer: We would agree that these programs have provided some very valuable conservation benefits over the years. However, we simply cannot afford to implement these new conservation provisions, continue all of our older conservation programs, do everything else that we need to do, and reduce the deficit all at the same time. Some programs will have to be reduced or eliminated and these are our recommendations. With the strong growth in non-federal conservation spending over the years and the heightened commitment to conservation in general, we believe that the State and local entities and individuals can and will continue to fund the highest priority work that would not be done under these terminating programs.

Question: Many of these fine programs have been carried out through cooperative arrangements with local sponsors, who have invested a great deal of effort through time, funding, planning and other resources. What do you propose that they should do if their priority projects, which are not yet complete but which are well under way, are to be abandoned?

Answer: Sponsors have demonstrated their willingness to pay for what they want if it is cost effective for them and produces needed local benefits. For years, they have paid the full cost to purchase land rights, move roads and to complete other conservation work that SCS does not cost-share in order to install Small Watershed and Resource Conservation and Development projects. We would propose that the local sponsors who wish to complete their ongoing high priority work would seek assistance from State and local agencies. Additional funding could be raised with local bonds, and sponsors could employ consultants to plan future projects if State and local agencies could not provide this assistance.

Question: One example of such a program that is extremely important in my state is the Watershed Program. Funding for that program in Arkansas has already been cut from $7 million in FY 1976 to $1.8 million for FY 87. 123 approved projects remain to be completed, pending the availability of funds. It is estimated that a bare minimum of $6 million is needed to complete the work. The need for the completion of these projects is critical. Don't you believe the work begun is too valuable, and the investments made by the local sponsors in good faith based on the cooperative agreement with the SCS is too important, to abandon now?

Answer: There is no easy answer to your question. Every Federal program, including the small watershed program, provides a valuable service or fulfills a National need or it would not be undertaken. Entitlement, National defense and all other programs must compete for available funds. Considering the projected Federal revenues and the Gramm-Rudman-Hollings deficit reduction requirements, there simply is not enough money available in Fiscal Year 1988 to fund all Federal programs. Legislation contained in Title XII of the Food Security Act of 1985 sets the conservation priorities because farmers need SCS assistance to meet the requirements of the Act or they will be ineligible to receive certain farm program benefits after 1990. SCS has therefore had to limit operations to only those programs that directly support the requirements of the Food Security Act of 1985.

Small watershed work makes a valuable contribution to natural resource conservation by helping solve erosion, flooding, water quality and water use problems. If the Congress accepts the termination proposal, the dams, channels and other project features currently in various stages of completion would no longer receive funds from this program. However, all ongoing contracts are for an entire structure or section of channel work. These contracts are fully funded, will be completed, and will provide additional local benefits irrespective of the FY 1988 program decisions. Given the worse case, local sponsors would choose not to complete all planned project work and the remaining benefits shown in the watershed plan would not accrue.

With respect to good faith, sponsors are aware of the risk that at any time future funds may not be available for their project because each watershed plan states that "Federal assistance to local sponsors is contingent upon available appropriations". We believe there is a greater potential to harm good faith if we fail to focus Agency resources on providing farmers and ranchers who need to comply with the Food Security Act requirements by 1990 and thereby deny them future Federal farm program assistance through no fault of their own.

EAST ARKANSAS WATER CONSERVATION PROJECT

Question: The Congress has for several years appropriated funds for a very successful project in my state—the Eastern Arkansas Water Conservation Project, a 26-county underground water study. Part of the funds have come from the Resource Conservation and Development account, which you are proposing to terminate. The remainder of the funds have come from the Conservation Technical Assistance account, which you are proposing to fund, but for the sole purpose of carrying out the provisions of the Food Security Act. I am dedicated to seeing this project continued. Do you propose to make any funds for this study available in FY 88?

Answer: The Eastern Arkansas Water Conservation Project is funded from two line items under the account "Conservation Operations" in FY 1987, $210,000 is from the "Resource Appraisal Program Development" line item and $265,000 is from the "Conservation Technical Assistance" line item. The FY 1988 budget proposes to terminate the Resource Appraisal funding and to continue the technical assistance item essentially at the 1987 level but with a substantial redirection to address Food Security Act workload. This being the case, we do not anticipate funding the Arkansas project in FY 1988.

RESPONSE TO NACD SUPPLEMENTAL REQUEST

Question: The National Association of Conservation Districts has proposed that a Supplemental Appropriation of approximately $95 million be made for FY 87 which would allow important ongoing work of the SCS to continue while implementing the Food Security Act's conservation programs. What is your reaction to that request?

Answer: The National Association of Conservation Districts (NACD) proposal is to add all new funding and staffing for the technical assistance to service the Food Security Act. Our position is that we will do this work, without staff increases, by redirecting our existing work force.

It is simply not possible to hire all new employees to do this work in the time span that we have to do it. Even if it were possible, it would not make good management sense to hire these people and fire half of them in two years when the Food Security Act workload decreases. On a fiscal basis, because of our legal mandate to substantially reduce the federal deficit, we cannot afford any budget increases where there is a viable alternative.

With additional help from Districts and the private sector and with the dedication and creativity of our our SCS work force, we can do this work without the increase proposed by NACD. It will mean some sacrifices and we will have to put other work on hold for two years, but it can be done.

FOOD SECURITY ACT WORKLOAD

Question: Your proposed budget, while increasing very slightly the funding for the areas you identified as "priority"--technical assistance, soil surveys, snow surveys and operation of plant material centers--would still result in the termination of 3,200 employees in FY 88. In your testimony you stated that it would take your entire field office staff to carry out the Food Security Act workload during the peak years of 1988 and 1989. How do you believe the SCS's remaining employees can handle that workload and still carry out the workload of these priority programs?

Answer: My statement referred to the field office staff funder under our "conservation technical assistance" line item. We have other field staff funded under the other programs proposed for termination such as watershed planning and construction, River Basins, Great Plains Program, and the Resource Conservation and Development program. However, these employees, are not directly involved in implementing the Food Security Act, and their loss would not significantly affect our ability to do this work. We believe that the staffing retained under the four continued programs--conservation technical assistance, soil surveys, plant material centers, and snow surveys--will enable us to meet our responsibilities under the new legislation.

BOONEVILLE PLANT MATERIALS CENTER

Question: What is the status of the Plant Materials Center at Booneville, Arkansas?

Answer: Initial planning and organizational arrangements for the establishment of the Booneville Center are underway. We are working closely with the Agricultural Research Service in obtaining the necessary land use clearances and making arrangements for the space and facilities that will be needed. Recruiting is underway for the center manager and assistant manager positions. A long-range plan of work is being developed and some limited field plantings are expected to be initiated by the end of fiscal year 1987. The center is projected to be fully operational by the end of fiscal year 1988.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

SCS STAFFING ALTERNATIVES

Question: First I am concerned that the Administration is proposing to try to implement the Sodbuster provisions of the Food Security Act of 1985 with the staffing levels of the past. In Idaho alone it is estimated that staffing levels of technical assistance for Sodbuster provisions and other compliance provisions of the Farm Bill would need to be increased by 50 full time employees. Given the deficit situation, has the Department of Agriculture given any thought to providing a limited amount of funding to hire consultants or retired SCS personnel on a limited basis to meet the increased demand for technical assistance in the county offices?

Answer: Yes, we have. We plan to use volunteers, and to hire temporary help including consultants and/or retired SCS personnel as our resources permit. These are but a few of the management initiatives being planned by SCS. Other initiatives include use of compensatory or overtime, short term details of staff from other less busy areas and internal improvements to become more efficient.

Question: In addition, it has been brought to my attention that the state SCS and area SCS offices have about three times the personnel in those offices as the ASCS state and area offices. Given the increased needs for county office personnel has the department considered moving state and area personnel to more on-the-ground positions in the county offices?

Answer: A portion of our state office staffs serve other SCS programs besides Conservation Technical Assistance activities. While some of the state office staff perform administrative or management functions a large portion perform technical support functions for the benefit of field offices. At the area office level about half of the assigned employees perform administrative or management functions, and the balance of the staff provides direct technical support to field offices. It simply is more efficient and cost-effective to locate certain staff specialists such as engineers, agronomists, and soil scientists at the area office level where they can provide a higher level of expertise to field office operations over a broader area which includes several conservation districts. It should also be noted that the workload requirements of the Food Security Act will impact on our State and area staffs as well as on field office staffs. Thus, we do not anticipate moving many state or area office staff to field office locations.

QUESTIONS SUBMITTED BY SENATOR KASTEN

USDA CONSERVATION INFORMATION AND EDUCATION PLANS

Question: Mr. Scaling, would you outline for the Subcommittee the steps the Department is taking to ensure that farmers know about the 1990 deadline now, and prevent a last minute rush in 1989 to file conservation plans?

Answer: The Department has established an information and education team that has designed and distributed informational materials to all USDA state and county offices on the requirements of this law. This team will continue with the development and distribution of other educational materials through the balance of this year.

Also, local offices of USDA have been holding meetings for producers to discuss the significance of these conservation provisions with producers. Lastly, ASCS county offices have mailed materials concerning these provisions to all producers of record.

We plan to continue this special information effort until we have reached all the producers in the Nation. However, this effort still does not guarantee that producers will, in fact, make arrangements to develop needed conservation plans prior to the January 1, 1990 deadline. As a result, SCS is very concerned that farmers may not contact our local offices early enough to schedule conservation plan development. Presently, SCS field office staffs are making highly erodible land and wetland determinations, determining conservation reserve program eligibility and preparing conservation plans for contracts, as well as helping producers develop conservation plans to meet this deadline date.

CONSULTATION WITH FISH AND WILDLIFE SERVICE ON SWAMPBUSTER

Question: One of the problems I found with the proposed interim regulations that were issued last year on swampbuster was the lack of a requirement for consultation with the Fish and Wildlife Service regarding enforcement. Would you comment on that? Also, can you venture a guess as to when final regulations might be issued on sodbuster and swampbuster?

Answer: The Department has and will continue to consult with the U. S. Fish and Wildlife Service in the development of the regulations, in the identification of wetlands and in the making of wetland determinations. Actual enforcement of the wetland provisions involves several levels: First, the producer annually certifies that he will not drain wetlands to produce an agricultural commodity on wetlands. Second, SCS determines whether the land in question is a wetland, converted wetland, or an artificial wetland (U. S. Fish and Wildlife staff may assist with this determination). Third, ASCS spot checks at least 15 percent of the producers annually to determine compliance. Also, citizens may report apparent violations by contacting ASCS. Lastly, any of the USDA agencies with which the producer requests commodity, conservation or loan assistance reviews the status of compliance.

We believe this system of enforcement provides a reasonable series of checks and balances, as well as providing opportunity for the Fish and Wildlife Service to participate in enforcement.

We anticipate publishing final rules by early June.

SWAMPBUSTER AND SODBUSTER COMPLIANCE CHECKS

Question: Mr. Scaling, could either you or Mr. Hertz outline the Department's plans to do field checks to determine farmer compliance with swampbuster and sodbuster?

Answer: The procedures outlined in the previous question on swampbuster enforcement would also apply for determining producer compliance with the highly erodible land, sodbuster requirements. Also, I would like to point out that the Agricultural Stabilization and Conservation Service (ASCS) has the lead responsibility for compliance determinations and will maintain the necessary records for this purpose. All other USDA agencies involved coordinate and report their findings to ASCS.

QUESTIONS SUBMITTED BY SENATOR SPECTER

NATIONAL TECHNICAL CENTERS

Question: I recently received your February 18, 1987 letter advising me that the SCS will retain its four National Technical Centers, one of which is located in Chester, Pennsylvania. I appreciate the SCS's sensitivity to the need to retain all four of these centers.

Do you anticipate any reductions in personnel at any of these facilities? What is the outlook for the Chester facility? If SCS does plan reductions, I would like some information for the record on how they are justified.

Answer: We do not anticipate any major reductions in personnel at the National Technical Centers (NTC's) other than those adjustments necessitated by agency wide budget reductions or sound personnel management. The 1988 Budget does propose to terminate most existing SCS programs including Watershed Planning, Watershed Construction, and the Resource Conservation and Development Program. If these budget reductions are approved, we would have to eliminate those positions at each NTC that are funded under the programs being reduced. Otherwise, we would maintain approximately the same number of positions that are currently assigned to these centers. The outlook for the Chester facility is the same as the other three centers.

RATIONALE FOR PROPOSED STAFFING REDUCTIONS

Question: I have been contacted by dozens of Conservation District Directors in Pennsylvania about funding to carry out the sodbuster and swampbuster conservation provisions in the 1985 Farm Bill. The Environmental Policy Institute has informed me that the Administration's budget would seriously hinder SCS's ability to implement these provisions properly. It has estimated that under the proposed budget, as many as 61 staff positions in Pennsylvania alone will be eliminated. How can this possibly be justified? Does the SCS not share the commitment of Congress for soil and wetlands conservation?

Answer: The President's 1988 Budget proposes reductions in SCS and other USDA conservation programs primarily for fiscal policy reasons. We simply can no longer afford to use Federal deficit dollars to fund these programs in light of other priorities and the urgent need to reduce Federal spending. The Soil Conservation Service remains firmly committed to the conservation of our Nation's soil and water resources. We have assigned the highest priority to implementing the conservation provisions of the 1985 Farm Bill. We believe that we can effectively carry out this work within the budget levels proposed for 1988. It will require some sacrifices, and some work on less seriously erodible cropland, on rangeland and other agricultural and urban lands will have to be put on hold for a short time. We will however be able to achieve significant reductions in excessive cropland erosion, our highest priority conservation problem. And we will be able to pick up again on our other conservation work after the January 1990 deadline for having conservation plans prepared is met.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

BIENNIAL BUDGET CYCLE

Question: Calls for budget reform are increasingly heard as budget deadlines are too often missed, important budget decisions are delayed, appropriation bills and other direct spending legislation are held up in committee, and ommibus spending bills take the place of timely and orderly consideration of individual bills. One procedural reform that is being considered is the two-year budget cycle where budget and appropriations matters would be considered in the first year, and authorizations and oversight would be undertaken in the second year. Would your department/agency favor a biennial budget process? What benefits would your agency achieve in a two-year appropriation cycle?

Answer: Yes, we would favor a biennial budget process. The obvious benefit would be a reduction in funding uncertainties that hamper effective program planning and management. This is particularly true for programs such as soil and water conservation where the Executive Branch and the Congress have widely differing funding priorities. Program and budget planning under the current process, must begin at the operating level well before decisions on final funding levels are made. Final commitments often cannot be made until after the fiscal year has begun, and as a result, programs are delayed in their execution phase. In the case of longer term projects such as SCS watershed projects, a longer funding period would permit work to proceed in a more orderly manner. A biennial budget process would also reduce the considerable amount of staff time that is required on the part of Executive agencies to develop and present annual budget requests.

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: About 95 to 98 percent of the SCS budget request is basically repetitious of the previous year's submission.

Question: What difficulties can you foresee in preparing and submitting a two-year budget to the Congress?

Answer: One difficulty would arise because of the longer planning horizon that would be involved in a biennial budget process. Budget requests are currently developed from 18 to 24 months before the beginning of the fiscal year. A biennial budget would extend this horizon another 12 months. There would have to be a procedure for accommodating unforeseen funding needs and contingencies arising after the budget estimates were developed and enacted. Further consideration would need to be given to raising reprogramming thresholds to provide more flexibility for shifting funds on a short term basis to deal with contingencies.

QUESTIONS SUBMITTED BY SENATOR SARBANES

FY 1988 BUDGET PROPOSALS FOR THE CHESAPEAKE BAY PROGRAM

Question: The fiscal 1986 and 1987 budgets provided specifically for 31 field positions for the Soil Conservation Service's Chesapeake Bay efforts. Does the Service plan to maintain the 31 SCS positions for the Bay in Fiscal 1988? Does the fiscal 1988 budget request provide sufficient funding for the 31 SCS employees?

Answer: The 1988 budget request does provide full funding at the 1987 level for the technical assistance program which funds the 31 positions allocated to the Chesapeake Bay effort. However, the budget assigns top priority to servicing the workload related to implementing the conservation provisions of the 1985 Food Security Act. This is expected to require a significant redirection of the SCS field work force at least during the peak Food Security Act workload period of 1988 to 1990. All other work will be given a lower priority during this period. The Chesapeake Bay program effort would be assigned high priority for any remaining field office staff time after the Food Security Act work is covered. We don't know at this point exactly how much staff time this would be, but it is likely that there would be some reduction, at least on a temporary basis, in positions available for the Bay program. It should also be noted that because the Food Security Act work is directed towards reducing excessive cropland erosion which currently contributes to Bay pollution problems, there would continue to be a beneficial impact on Bay water quality.

Question: According to estimates prepared by various Chesapeake Bay organizations and conservationists, the proposed budget for the Soil Conservation Service for fiscal 1988 would eliminate approximately 120 SCS positions in the three states that border the Bay. In view of these proposed cuts, how does SCS plan to implement the commitments it has made to the Chesapeake Bay program and to State and local conservation programs?

Answer: We would honor our commitments to the Chesapeake Bay program to the greatest extent possible after our commitments related to the conservation provisions of the Food Security Act are met. This will probably mean some delays for a two-year period but we would anticipate fully restoring our Chesapeake Bay work once we are past the January 1990 deadline for having conservation plans prepared for all those farmers who farm highly erodible cropland and who wish to retain their USDA farm program benefits. In the interim, we will have to look to State agencies and the local conservation districts to play a greater role in maintaining ongoing conservation programs.

Question: Concerns have been expressed by many soil conservation districts that the proposed budget for SCS will divert conservation programs and force reassignment of personnel from the Chesapeake Bay area to other areas of the country to meet the requirements of the Food Security Act. How does SCS plan to meet its statutory and other responsibilities to soil and water conservation in Maryland and the other Bay area states if personnel and funding resources are diverted from this area? If resources are diverted, who will continue to provide the technical leadership for the cost-sharing program? Why didn't SCS request additional funding to meet the new requirements and increased workload generated by the Food Security Act?

Answer: We are aware that many soil conservation districts are concerned about the impact of the proposed 1988 budget on our ability to carry out our soil and water conservation responsibilities. A number of options were considered for addressing the Food Security Act workload. We believe that the President's budget request represents a workable approach for dealing with the "bulge" of work created by the Food Security Act. At the same time it's fiscally responsible, recognizing the legislated mandate to reduce Federal deficits. Other conservation work will have to be put on hold in Maryland and throughout all the states for up to two years as the intensive conservation planning effort for each farm is substantially completed. As we mentioned earlier, we will be looking to state and local agencies to assume a greater role in supporting ongoing conservation programs, including the Chesapeake Bay cost-sharing program, and in assisting with the Food Security Act work. We also have reason to be encouraged that as a result of some innovative approaches we have developed, there are significant opportunities to improve our efficiency in the development of conservation plans. We recognize that it will not be easy and some sacrifices will be required, but the job can be done.

WATER QUALITY ACT

Question: The Water Quality Act recently passed by the Congress created a new program to control non-point source pollution. What impact will this new program have on the Service?

Answer: We expect that States will elect to address agricultural sources of nonpoint source pollution through the matching grant aspects of this new law. The Soil Conservation Service, State Soil and Water Conservation agencies and conservation districts will be called upon to serve as the delivery system for the planning and implementation aspects of this new program. Supervision and training of district personnel will be required as these programs grow and become realities. SCS will have to carefully evaluate all requests for assistance to insure that the activities undertaken are compatible with the objectives of the Food Security Act of 1985. When objectives of the Service, the State and the conservation districts are compatible, we will make every effort to assist in meeting these objectives. We expect that we will see an additional workload imposed, in part, by the Federal consistency clause. This will allow the States to review Federal financial assistance programs for consistency and will require the Service to evaluate and respond to any claim of inconsistency.

Without knowing what the Environmental Protection Agency will request for FY-87 and FY-88, it's difficult to predict an impact for many of the Water Quality Act provisions. We do know that SCS will be required to report annually on our activities that support the US-Canadian 1978 Water Quality Agreement. If Congress were to appropriate the resources identified under Section 208(j), the Service would be expected to develop a national agricultural nonpoint source program. If resources were appropriated under Section 304(k), it's possible that EPA would seek to utilize the authorities of SCS programs to accomplish their legislative mandates. The workload associated with these activities is proportional to the magnitude of the appropriation.

We are cooperating and assisting in addressing the environmental goals established for the Nation by devoting our energies to servicing the needs of America's farmers as they attempt to comply with the provisions of the Food Security Act of 1985. The Highly Erodible Land Provision and the Conservation Reserve Program will assist the States in meeting many nonpoint source pollution control objectives. Surface run-off from agricultural land carries sediments, salts, dissolved and absorbed pollutants, and bacteria. The efforts to reduce the erosion on highly erodible lands will reduce the delivery of many of these potential pollutants to the Nation's streams, rivers, lakes, and estuaries.

STATE PRIORITIES FOR NONPOINT SOURCE PROBLEMS

Question: I understand that the three Bay States have each established a priority system for identifying nonpoint source problem areas around the Bay. How does this relate to SCS priorities?

Answer: The Soil Conservation Service supports the need for a priority system for identifying Bay nonpoint source problem areas. These priority areas become the priorities of Conservation Districts and the basis for SCS prioritization. We support this "grassroots" approach and would like to see it followed in addressing nonpoint source problems. We believe that water quality priorities need to be established locally and when made known they will influence the delivery of our services.

AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE

QUESTIONS SUBMITTED BY SENATOR BURDICK

SWAMPBUSTER AND SODBUSTER

Question: I understand that the final regulations for the Swampbuster and Sodbuster provisions of the 1985 Farm Bill are still not out. Earlier this week, when the Secretary was here before the Committee testifying, his Deputy indicated that these regulations are almost out and that farmers should rely on the preliminary regulations that went out earlier. Well, I don't buy that. If the final regulations aren't out, our farmers simply cannot know whether a provision is going to change or not.

How can a farmer sign up for the farm program or submit a farm plan to Farmers Home Administration to receive a loan when he does not know what the rules for the signup are?

Answer: Farmers seeking benefits from the Department are subject to the provisions of the interim rule until the final rule is published. However, farmers in compliance with the interim rule for the current crop year will not be penalized by changes in the final rule.

Question: What are you going to do when a farmer signs up thinking he was in compliance based on the preliminary regulations and then he is found not to be in compliance based on the final regulations?

Answer: If, at the time of publication of the final rule, the final rule is more restrictive than the interim rule and a farmer has taken irrevocable actions based on the interim rule, such producers will be permitted to remain eligible for the crop year involved.

Question: Are you going to force him to lose all of the benefits under the farm program?

Answer: No, farmers would be able to retain the benefits under the interim rule for the crop year involved.

Question: When are the final regulations going to be out?

Answer: Currently, a USDA Sodbuster/Swampbuster committee is drafting the final rule for clearance by OMB. We are hopeful that the final rule can be published during the month of June 1987.

Question: If they are not done very soon, can you, at least, issue the majority of them, or would you recommend delaying their implementation for the 1987 crop year?

Answer: We anticipate that the final rule will exclude 1987 crops planted before the final rule is published, and that it will cover 1987 crops planted after its publication in June.

ELIMINATION OF COST-SHARE PROGRAMS

Question: Can you guarantee me that every acre that would benefit from continuance of the cost-share programs is now going to be entered into the Conservation Reserve?

Answer: No, we cannot guarantee that. As you know, the objective of the Conservation Reserve Program is to address critical soil erosion on cropland. While it is unlikely that every acre that would benefit under the Agricultural Conservation or Great Plains Programs will be entered into the CRP, it is realistic to expect that, in total, substantially more acres will be enrolled into the CRP than would have been enrolled under the traditional cost-share programs for that particular objective.

Question: If you cannot make that guarantee for me then you cannot tell me that there is not going to be a gap left between eliminating the cost-share programs and fully implementing the Conservation Reserve Program. Can You?

Answer: No. The CRP will address the primary objective of critical soil erosion on cropland and will indirectly affect tree planting. Acres that previously received treatment under traditional programs to meet secondary objectives, such as emergency and water conservation, rangeland and wildlife preservation would not continue to be treated. However, it is anticipated that State and private funding for these objectives would be provided when it is in the respective State or private interest to do so.

RESCISSIONS

Question: I would like to know what the result of the proposed rescissions is across the country. I understand that you are holding up the funding for these various programs and that, therefore, no work is being done. Is this true?

Answer: The proposed rescissions have created a hold on some new activity under three ASCS conservation programs -- the ACP, Water Bank, and the Emergency Conservation Programs. Activity on prior year contracts has continued since funds were obligated for the full contract period at the time the contracts were signed. In addition, unobligated balances at the end of fiscal year 1986 and some new funds in 1987 were available for new contracts as indicated:

FUNDS AVAILABLE FOR ASCS COST SHARING IN FY 1987
(Dollars in Millions)

Program	FY 1986 Unobligated Carry-over	New FY 1987 Funds	Total Funds Available (Allocated)	Obligations Through 2-1-87	Unobligated Balance 2-1-87
ACP	$77.4	$12.5	$90.0	$9.1	$80.9
WBP	4.7	.2	4.9	1.7	3.2
ECP	8.4	0	8.4	1.4	7.0

Question: I have people in North Dakota telling me that they cannot get any renewals on their Water Bank contracts, for example. How long do you expect to hold this money up?

Answer: The proposed rescission was published in the Federal Register January 9, 1987. If Congress fails to approve the rescissions by March 15, the funds must be made available for obligation. In that case, allocations could be released around April 1, 1987.

Question: By not making the renewals and issuing the contracts now, does this actually cost the government more in the future?

Answer: No, since the cost of renewing Water Bank contracts is contingent upon land values. What is encountered more often than increased costs is a reduction in the amount of prime wetlands brought under agreement each year. Also, when funds are released late in the fiscal year, signups and cost-share assistance may not be timely accomplished.

Question: Once the proposed rescission had died, do you make contracts retroactively to make up for this lost time?

Answer: Yes, contracts are made retroactively. Contracts are based on the calendar year and are therefore effective in January. For example, landowners whose contracts expired in December, 1986, and who renew their contract in the third quarter of FY 1987 will be paid rental payments for the interim period.

CONSERVATION RESERVE PROGRAM

Question: Has the Conservation Reserve Program contributed to a decline in production to which you can point so far?

Answer: Yes. Through the third signup period, 8.5 million acres of highly erodible cropland were removed from production for 10 years, including the following reductions in CCC base acreage:

Commodity	Acres
Wheat	2,814,266
Corn	616,191
Sorghum	846,785
Barley	617,411
Oats	287,587
Cotton (Upland)	370,919
Cotton (ELS)	606
Peanuts	1,300
Tobacco	218
Rice	1,767
Total	5,557,050

Question: What is your expectation for 1987? How much of a decrease in production will we see as a result of the Conservation Reserve Program?

Answer: Enrollment data is not yet available from the fourth CRP signup period held February 9 through 27. However, our State and county offices indicate that signup is heavy. We are optimistic that CRP enrollment will at least double. The percentage of base reduction on the acreage offered during the fourth signup may also be higher because of the incentive made available to corn producers.

No additional signups for 1987 contracts are anticipated. The next signup period will be for 1988 contracts.

Question: I understand in some counties that there is a long waiting period to get signed up for the program. Much of this is due to the slowness of determining eligibility. Would you care to respond to this so that I have an answer for farmers when they call me on the length of time it takes to get signed up in the Conservation Reserve Program?

Answer: In order to assist producers, SCS determines cropland eligibility, to the extent possible, at the time of signup. The area offered must meet established erosion and cropland criteria. This necessitates collecting a cropping history on each field for crop years 1981-85. While SCS is experiencing workload pressures in some parts of the country, they are currently implementing a number of initiatives to help speed the process of performing eligibility determinations. We are optimistic that these actions will reduce any excessive waiting periods.

Also, farmers should realize that there is no requirement that the SCS make the determination of eligibility prior to signup. Farmers are encouraged to bid acres during announced signup periods whether or not SCS has made the eligibility determination.

Question: Another complaint I have had is that the cost of grass seed for the land going into the Conservation Reserve Program is already high and getting higher. What portion of the cost of the seed is paid through cost sharing?

Answer: The Food Security Act of 1985 provides that 50 percent of the cost of establishing permanent vegetative cover be shared with the producer.

Question: Is it possible for a farmer to pay for grass seed and preparation through CRP cost sharing and also to apply and be eligible for cost sharing through ACP to pay for grass on CRP acres?

Answer: The establishment of permanent vegetative cover on CRP acres is funded through CRP. Producers who have received cost sharing for cover establishment under other existing conservation programs may designate the area for CRP but are not eligible for any additional cost-shares for cover establishment under the Conservation Reserve Program, unless the established cover fails for reasons beyond the control of the producer, such as destruction by natural disaster.

Question: I heard from one farmer who told me SCS wants him to seed what he calls high-priced native grass. He claims that lower cost tame grass seed is more available and will do just as good a job at controlling soil and water erosion. Is this true that your requirements are restricted to high-priced native grass? If so, why?

Answer: There is no national requirement that only native grass is an acceptable cover. The State and local conservation review group determines the seeding requirements that are best suited for their counties and offers producers a wide variety of seeding mixtures that are acceptable.

WATER BANK PROGRAM

Question: Through a proposed rescission of $8 million in fiscal year 1987 funds, the President's budget seeks to terminate the Water Bank Program that provides 10-year contracts for the preservation of wetlands. At the end of fiscal year 1986, 171 agreements were in effect. Does the Department plan to terminate agreements in mid-course?

Answer: No. Agreements are fully obligated at the time they are signed and will be honored for the full 10-year period. Therefore, agreements signed in 1986 will be honored through 1996.

Question: Under the "Swampbuster" provisions of the 1985 Food Security Act, conversion of wetland for agricultural purposes will be discouraged. Do the Soil Conservation Service and the Agricultural Stabilization and Conservation Service have a plan for maintaining and improving migratory waterfowl habitat and other wildlife resources through "Swampbuster?"

Answer: There is no statutory authority in the "Swampbuster" provisions whereby the Department could require land owners or operators to carry out maintenance or improvement practices as is currently done under the Water Bank Program.

AGRICULTURAL CONSERVATION PROGRAM

Question: The Agricultural Conservation Program (ACP) is designed to address the highest priority resource problems in conserving soil and water resources. The President has proposed to rescind $164 million in fiscal year 1987 funds and decrease funding to $12.5 million in fiscal year 1987, bringing the ACP to a halt in fiscal year 1988. Annual cost sharing agreements entered into during fiscal year 1987 totaled $12.5 million. Of this amount, $3.2 million was used for emergency drought assistance caused by dry weather conditions in the Southeastern United States.

If ACP is terminated and emergency conditions such as those in 1987 arise, and these conditions are on non-conservation reserve acres, what aid will be available to protect land and water resources?

Answer: The farmer would have to perform the needed emergency drought practices with his own resources or seek State or other assistance. ASCS is not aware of any similar Federal, State, or private programs or insurance initiatives that would assist in rehabilitating land or water resources damaged by natural disaster, except the Emergency Conservation Program.

Question: In fiscal year 1986, 320 counties participated in cost-share levels for erosion control practices on a voluntary basis. Although results indicate the cost-effectiveness of erosion control practices under ACP, and prompted continuation of the program in 1987, variable cost-share levels would be terminated in fiscal year 1988.

Has the Department estimated by county the impact of the termination of the variable cost-share levels for erosion control?

Answer: In each of the past two fiscal years, 1985 and 1986, about $2,000,000 was allocated to those counties that volunteered to use the variable cost-share method of determining cost-share levels. If funding for ACP is eliminated in FY 1988, all counties, including those volunteering for the variable cost-share project, will not receive an allocation for erosion control.

Question: Would you please provide the Subcommittee with a breakdown of the current levels of Federal/State/local funding for erosion control for these counties and what the anticipated cost would be in fiscal year 1988 under the President's Budget?

Answer: We have no data showing the funding for related State and local programs to treat erosion problems. However, it is anticipated that a total of $328 million will be provided by State and local governments for conservation programs in FY 1987.

The variable cost-share (VC/SL) funds are distributed to the States based on the amount of funds used the previous year for erosion control practices in the counties volunteering for VC/SL. The States then determine the share each VC/SL county receives. This breakdown is not available at the national level. A breakdown showing how the $2,027,200 was allocated in FY 1986 among 29 States, with a list of participating VC/SL counties, is provided.

No Federal funds are proposed in FY 1988 for ACP.

[The information follows:]

State	FY 1986 VC/SL Allocation	Approved Counties		
Alabama	$32,700	Autauga	Escambia	Perry
		Tuscaloosa		
Arkansas	82,400	Ashley	Bradley	Carroll
		Chicot	Clay	Cleveland
		Conway	Dallas	Drew
		Hempstead	Johnson	Lafayette
		Lincoln	Logan	Madison
		Pike	Randolph	Searcy
				Stone
California	9,400	San Luis Obispo		
Florida	55,200	Citrus	Gilchrist	Hernando
		Jefferson	Lafayette	Marion
		Pasco	Santa Rosa	Sumter
Georgia	7,300	Lee	Telfair	
Idaho	25,500	Benewah	Canyon	Nez Perce
Illinois	58,200	Brown	De Witt	Henry
		Jasper	Knox	Mercer
		Pike	Richland	

Indiana	$171,000	Allen	Cass	Crawford
		Decatur	Delaware	Elkhart
		Fountain	Gibson	Hancock
		Harrison	Henry	Huntington
		Jennings	Knox	LaGrange
		Miami	Monroe	Montgomery
		Newton	Perry	Porter
		Putnam	Randolph	Ripley
		St. Joseph	Starke	Union
		Wabash	Warrick	Wayne
				Whitley
Kentucky	70,500	Bath	Bullitt	Casey
		Fulton	Harrison	Henry
		Hopkins	Meade	Nicholas
		Ohio	Oldham	Rockcastle
		Warren	Robertson	
Maine	25,000	Aroostook		
Maryland	39,500	Baltimore	Carroll	Cecil
		Frederick	Harford	Howard
		Montgomery	Washington	
Massachusetts	7,400	Franklin	Plymouth	
Michigan	15,500	Barry	Van Buren	
Minnesota	14,600	Chisago	Kittson	
Mississippi	104,000	Clay	Covington	De Soto
		Hinds	Itawamba	Lamar
		Prentiss	Scott	Simpson
		Smith	Tippah	Yazoo
Missouri	196,400	Benton	Caldwell	Clinton
		Cooper	Daviess	Gentry
		Johnson	Knox	Lewis
		Livingston	Macon	Moniteau
		Monroe	Nodaway	Ralls
Montana	14,000	Rosebud		
Nebraska	40,000	Johnson	Otoe	Pawnee
New York	158,000	Cattaraugus	Chautauqua	Columbia
		Delaware	Dutchess	Fulton
		Greene	Herkimer	Livingston
		Oneida	Orange	Otsego
		Schenectady	Schoharie	Sullivan
				Ulster
North Carolina	33,000	Alamance	Caswell	Guilford
		Person	Rockingham	Tyrrell
				Washington
Ohio	41,500	Butler	Clark	Crawford
		Hamilton	Huron	Licking
		Medina	Richland	Wayne
Oklahoma	26,000	Caddo	Craig	

Oregon	$7,700	Lane	Wallowa	
South Carolina	39,600	Chester	Edgefield	Greenville
		Newberry	Spartanburg	York
Tennessee	360,200	Bedford	Benton	Bledsoe
		Cannon	Carroll	Carter
		Cheatham	Chester	Claiborne
		Clay	Crockett	Cumberland
		Davidson	Decatur	DeKalb
		Fayette	Franklin	Gibson
		Grainger	Greene	Hamblen
		Hancock	Hardeman	Hardin
		Hawkins	Haywood	Henderson
		Henry	Humphreys	Jefferson
		Johnson	Lauderdale	Lawrence
		Lincoln	Maury	McMinn
		McNairy	Montgomery	Morgan
		Polk	Rhea	Robertson
		Rutherford	Sevier	Smith
		Sullivan	Sumner	Tipton
		Trousdale	Unicoi	Washington
		White	Williamson	
Vermont	70,700	Addison	Bennington	Caledonia
		Chittenden	Essex	Franklin
		Grand Isle	Lamoille	Orange
		Orleans	Rutland	Washington
		Windham	Windsor	
Virginia	297,000	Accomack	Albemarle	Alleghany
		Augusta	Bath	Bedford
		Bland	Botetourt	Brunswick
		Buckingham	Caroline	Campbell
		Carroll	Charles City	Charlotte
		Chesapeake	Chesterfield	Clarke
		Culpeper	Cumberland	Craig
		Dickenson	Dinwiddie	Fairfax
		Fauquier	Floyd	Fluvanna
		Franklin	Frederick	Giles
		Gloucester	Grayson	Greene
		Greensville	Goochland	Halifax
		Hampton	Hanover	Henrico
		Henry	Highland	Isle of Wight
		James City	King and Queen	
		King George	King William	Lancaster
		Lee	Loudoun	Louisa
		Lunenburg	Madison	Mathews
		Mecklenburg	Middlesex	Montgomery
		Nelson	New Kent	Newport News
		Northampton	Nottoway	Orange
		Page	Patrick	Pittsylvania
		Prince Edward	Prince George	
		Prince William	Pulaski	
		Rappahannock	Richmond	Roanoke
		Rockbridge	Rockingham	Russell
		Scott	Shenandoah	Smyth
		Southampton	Spotsylvania	Stafford

		Suffolk	Surry	Sussex
		Tazewell	Virginia Beach	Warren
		Washington	Westmoreland	Wise
		Wythe	York	
West Virginia	24,400	Grant	Hampshire	Mineral
		Morgan	Nicholas	Webster
Wisconsin	500	Richland		
Total	$2,027,200			

EMERGENCY CONSERVATION PROGRAM

Question: Cost sharing to assist farmers in rehabilitating farmland damaged by natural disasters totaled $20 million in fiscal year 1987. Based on your best estimate, is it likely that farmers will experience disaster conditions caused by flood, tornado, hurricane, or other problems for which such assistance may be needed in fiscal year 1988?

Answer: Yes. Experience under the Emergency Conservation Program has demonstrated that almost all types of major disasters (flood, drought, hurricane, tornado, wildfire, etc.) that qualify under the program occur sometime each year somewhere in the country.

Question: Do you expect to have carry-over funds available in this account?

Answer: If the Congress does not approve the rescission, request for the release of the $10 million previously proposed for rescission will be sent to OMB the week of March 15. Therefore, unless a major disaster occurs before September 30, 1987, we anticipate that $5 to $8 million would then be available for use in fiscal year 1988.

Question: Where should such farmers expect to obtain aid for emergency conservation practices to replace or restore their farmland after such disasters?

Answer: Farmers will continue to receive assistance under the ECP until the funds currently available are exhausted. At that time, farmers whose lands are too extensively damaged to rehabilitate with their own resources will have to seek assistance from State or private sources.

Question: Would you please provide the Subcommittee with a breakdown by type of disaster of the Federal and State/local share of funds used for this type of farm disaster assistance in fiscal years 1986 and 1987?

Answer: The following tables provide a breakdown of Federal assistance through the ECP by type of disaster for FY 1986 and FY 1987. ASCS does not compile the amount of State and local funds expended for this type of assistance.

[The information follows:]

Emergency Conservation Program
Outlays by Type of Disaster
Fiscal Year 1986

State	Flood	Tornado	Hurricane	All Other Disasters	Total
Alabama	$11,024	$9,422	$1,029,055	--	$1,049,501
California	411,343	--	--	$32,343	443,686
Colorado	457,160	--	--	-43,396	413,764
Georgia	42,610	3,735	153,999	38,568	161,776
Hawaii	--	--	--	95,946	95,946
Idaho	26,287	--	--	--	26,287
Illinois	37,211	--	--	--	37,211
Indiana	10,030	--	--	--	17,830
Iowa	99,821	7,800	--	-62,485	37,336
Maine	22,256	--	--	3,298	25,554
Maryland	6,000	--	--	--	6,000
Massachusetts	10,175	--	2,312	--	12,487
Michigan	58,757	--	--	960	59,717
Mississippi	15,478	4,150	337,699	--	357,327
Missouri	47,513	--	--	-35,678	11,835
Montana	-910	--	--	125,146	124,236
Nebraska	159,162	--	--	-159,162	--
Nevada	188,315	--	--	--	188,315
New Mexico	342,039	3,000	--	46,888	391,927
New York	2,106	--	--	--	2,106
Ohio	1,632	--	--	--	1,632
Oregon	2,781	--	--	--	2,781
Pennsylvania	37,175	84,627	3,786	-14,629	110,959
South Carolina	--	3,263	--	--	3,263
South Dakota	56,948	--	--	-939	56,009
Texas	82,266	--	--	--	82,266
Utah	188,234	--	--	836	189,070
Vermont	3,800	--	--	-3,800	--
Virginia	965,548	--	--	--	965,548
Washington	9,016	--	--	3,508	12,524
West Virginia	1,976,230	--	--	1,719	1,977,949
Wisconsin	11,979	9,641	--	--	21,620
Wyoming	57,826	--	--	--	57,826
TOTAL	$5,339,812	$125,638	$1,526,851	-$48,013 a/	$6,944,288 b/

a/ In FY 1986, the amount of unused funds returned by States to the National level exceeded funds spent by States on other types of disasters.

b/ Excludes technical assistance and refunds. Total outlays, including $154,521 for technical assistance and refunds of $155, are $7,098,964.

Emergency Conservation Program
Allocations by Type of Disasters
Fiscal Year 1987

State	Flood	Other Disasters	Total
Idaho	$8,000	$73,249	$81,249
Iowa	100,000	--	100,000
Kansas	250,000	--	250,000
Michigan	830,000	--	830,000
Missouri	1,210,000	--	1,210,000
Montana	674,247	--	674,247
New York	13,544	--	13,544
Oklahoma	630,000	--	630,000
Oregon	60,000	--	60,000
South Dakota	10,000	--	10,000
Utah	--	30,000	30,000
TOTAL	$3,785,791	$103,249	$3,889,040

ATTRACTING CONSERVATION RESERVE BIDS

Question: Have you considered other methods of attracting more participation into this program? If so, what are they?

Answer: Although acreage goals for the Conservation Reserve Program are being met, we were seeing low participation in the corn belt and low enrollment of corn base acreage. With the announcement of the paid land diversion for feed grains under the annual commodity program, it was obvious that this situation would worsen without decisive action. The corn "bonus" rental payment was determined to be the best alternative to attract highly erodible cropland in the Midwest. Other methods considered included increasing the maximum acceptable rental rates and redefining the eligibility criteria. Neither of these alternatives was determined to be effective enough to have a substantial impact on reducing erosion in the corn belt while at the same time reducing CCC outlays in the long term.

At this time we do not plan to offer similar incentives to producers of other commodities during future CRP signups.

Question: For example, have you considered elimination of the waiting period after land is acquired by a person before he can enter it into the conservation reserve?

Answer: Section 1235 of the Food Security Act prohibits contracts from being entered into on land where ownership has changed in the 3-year period preceding the first year of the contract period, unless the new ownership was acquired: (1) by will or succession as a result of death of the previous owner, (2) before January 1, 1985, or (3) the Secretary determines that the land was acquired under circumstances that give adequate assurance that the land was not acquired for the purpose of placing it in the CRP.

Question: What about full payments being allowed to go to a new owner of land that had already been entered into the conservation reserve by its former owner?

Answer: This is already allowable. If, during the period of a CRP contract, an owner or operator of the land subject to the contract sells or otherwise transfers the ownership or right of occupancy of such land, the new owner or operator may continue the contract under the same terms and conditions.

CONSERVATION RESERVE PROGRAM

Question: Given the unpredictability of the amount of land that will be entered into the conservation reserve during the current signup, I expect that you may find reason to change the estimate of how much this program will cost in fiscal year 1988. Has your current estimate of $1,388,000,000 changed?

Answer: No. Our current estimate for CRP, in accordance with the President's Budget, remains at $1.388 billion. There is no basis for revising this projection until results of the February, 1987, signup are known. Up to 6.5 million additional 1987 crop acres may be accepted into the reserve without exceeding the costs projected in the FY 1988 Budget.

Question: The CBO estimates a lower figure -- $1.217 billion for 1988. Are you familiar with this estimate and can you explain the difference?

Answer: I am not familiar with the CBO estimate, but it appears that the difference may be due in part to the impact of the recently announced 1987 corn bonus on program costs in fiscal year 1988. Our estimate assumes that higher value land, as a result of the corn bonus, will enter into the CRP in fiscal year 1987. Therefore, our 1988 budget has included the estimated additional rental payments due on these acres beginning in fiscal year 1988.

Question: Would you please provide the Subcommittee with an estimate, in accordance with the President's budget for each fiscal year, (1) the number of acres expected to be enrolled during the full term of the Conservation Reserve Program; (2) the estimated soil savings; (3) the reduction of commodity program base acres; and (4) the cost delineated for rental payments, conservation cost share, administrative, and other.

Answer: ASCS administrative costs for the Conservation Reserve Program were $5.36 million in FY 1986, and are estimated at $8.40 million and $16.4 million for FY 1987 and FY 1988 respectively. These amounts include ASCS county office staff years for bid acceptance, contract activity, cost-share payments and annual rental payments. County staff years included in the 1988 Budget are 244 for FY 1986, and 375 and 711 for FY 1987 and FY 1988, respectively.

The following chart shows a projection of CRP costs, acres, and soil savings from 1986 through the year 2000.

[The information follows:]

CONSERVATION RESERVE PROGRAM ESTIMATES
(Basis for FY 1988 Budget)

Crop Year	Acres Enrolled	Base Acre Reduction	Soil Savings	Rental Payments			Cost-Share Payments	Technical Assistance	Total Payments 3/		
	(acres/tons in millions)			(dollars in millions)			(dollars in millions)				
				Cash	CCC Certificates	Total	Cash	Cash	CASH	CCC CERTIFICATES	TOTAL
1986	2	1.1	52.6	--	--	—	12	11	23	—	23
1987	13	8.4	325.0	--	266 1/	266	687	13	700	266	966
1988	13	8.4	312.0	678	98	776	689	21	1,388	98	1,486
1989	12	7.8	264.0	1,328	228	1,556	660	20	2,008	228	2,236
1990	5	3.2	100.0	2,042	234	2,276	285	8	2,335	234	2,569
1991	--	--	--	2,342	234	2,576	--	--	2,342	234	2,576
1992	--	--	--	2,342	234	2,576	--	--	2,342	234	2,576
1993	--	--	--	2,342	234	2,576	--	--	2,342	234	2,576
1994	--	--	--	2,342	234	2,576	--	--	2,342	234	2,576
1995	--	--	--	2,342	234	2,576	--	--	2,342	234	2,576
1996	--	--	--	2,342	234	2,576	--	--	2,342	234	2,576
1997	--	--	--	2,342	148	2,490	--	--	2,342	148	2,490
1998	--	--	--	1,800	—	1,800	--	--	1,800	—	1,800
1999	--	--	--	1,020	--	1,020	--	--	1,020	—	1,020
2000	--	--	--	300	--	300	--	--	300	—	300
TOTAL	45	28.9	1,053.6	23,562	2,378	25,940 2/	2,333	73	25,968	2,378	28,346

1/ Includes corn "bonus" rental payments of $180 million in CCC certificates based on an estimated 900,000 acres accepted.

2/ Excludes production adjustment savings to CCC.

3/ Includes payments coming due each fiscal year, not total crop year costs.

Question: Is annually harvested hay land considered a crop or cultivated acreage under the Conservation Reserve Program? Why or why not?

Answer: Section 1201 of the Food Security Act of 1985 defines an agricultural commodity, in part, as any agricultural commodity planted and produced in a State by annual tilling of the soil, including tilling by one-trip planters. Section 643, General Provisions of the Agricultural Appropriations Act that was incorporated in Public Laws 99-500 and 99-591, amended Section 1231 of the Food Security Act to provide that alfalfa and other multiyear grasses and legumes in rotation, approved by the Secretary of Agriculture, shall be considered to be agricultural commodities for the purpose of the Conservation Reserve Program. Therefore, annually harvested hay land planted in a rotation, as approved by the Secretary, is an eligible commodity under the Conservation Reserve Program beginning with the February, 1987 bid period.

COSTS TO STATES

Question: For most, if not all, of the cost-share programs, you proposed that the States, or even local governments, will pick up the cost to continue these programs. Please provide, for the record, on a State basis, the costs incurred for fiscal years 1987, 1988 and 1989 if the States opt for full continuation of the programs on a cost-share basis.

Answer: For the Agricultural Conservation Program and the Water Bank Program, the cost to the States for FY 1987 would equal the amount proposed for rescission, if the rescission is passed. The costs for FY 1988 and FY 1989 are each assumed to equal the amount appropriated for FY 1987, since the appropriations for these programs traditionally have not included increases for inflation.

For the Forestry Incentives Program and Colorado River Basin Salinity Control Program, no FY 1987 rescissions were proposed and therefore the States would not incur any costs for these programs in FY 1987. As in the case of the ACP, FY 1988 and FY 1989 costs are each assumed to equal the FY 1987 appropriation.

For the Emergency Conservation Program, costs to the States cannot be predicted since program payments are tied to the occurrence of damage from natural disasters. In each of the past two years, total program payments have equaled about $10 million. For the Rural Clean Water Program, the States will not incur any additional costs since sufficient funds are available to complete existing projects.

State breakdowns are provided for the ACP, WBP, FIP, and CRBSCP.

[The information follows:]

STATE/LOCAL COSTS TO CONTINUE ACP AND WBP
(dollars in thousands)

STATE	Agricultural Conservation Program		¶	Water Bank Program	
	FY 1987	FY 1988/89	¶	FY 1987	FY 1988/89
Alabama	$4,618	$4,971	¶		
Alaska	263	284	¶		
Arizona	1,973	2,124	¶		
Arkansas	3,464	3,729	¶	$366	$375
California	4,788	5,135	¶	503	516
Colorado	3,850	4,145	¶		
Connecticut	346	373	¶		
Delaware	198	213	¶		
Florida	3,593	3,868	¶		
Georgia	4,190	4,510	¶		
Hawaii	540	581	¶		
Idaho	2,730	2,939	¶		
Illinois	5,375	5,787	¶		
Indiana	3,577	3,851	¶		
Iowa	6,004	6,463	¶		
Kansas	5,013	5,396	¶		
Kentucky	4,065	4,376	¶		
Louisiana	3,233	3,480	¶	458	470
Maine	2,201	2,370	¶		
Maryland	856	922	¶		
Massachusetts	462	498	¶		
Michigan	4,014	4,321	¶		
Minnesota	6,138	6,608	¶	1,533	1,571
Mississippi	4,103	4,417	¶	494	507
Missouri	6,944	7,476	¶		
Montana	4,735	5,098	¶	47	48
Nebraska	4,020	4,328	¶	176	181
Nevada	709	763	¶		
New Hampshire	583	628	¶		
New Jersey	506	544	¶		
New Mexico	2,097	2,257	¶		
New York	4,134	4,450	¶		
North Carolina	3,742	4,028	¶		
North Dakota	3,860	4,156	¶	3,235	3,315
Ohio	3,722	4,007	¶		
Oklahoma	4,460	4,801	¶		
Oregon	3,367	3,624	¶		
Pennsylvania	4,025	4,333	¶		
Rhode Island	61	66	¶		
South Carolina	2,134	2,298	¶		
South Dakota	3,030	3,262	¶	1,034	1,060
Tennessee	3,465	3,730	¶		
Texas	15,310	16,480	¶		
Utah	1,764	1,899	¶		
Vermont	837	902	¶		
Virginia	2,595	2,794	¶		
Washington	4,235	4,559	¶		
West Virginia	1,506	1,621	¶		
Wisconsin	4,577	4,927	¶	320	328
Wyoming	1,803	1,941	¶		
Puerto Rico	520	560	¶		
Virgin Islands	21	22	¶		
Total	$164,356	$176,935		$8,166	$8,371

STATE/LOCAL COSTS TO CONTINUE FIP AND COLORADO SALINITY PROGRAMS
(dollars in thousands)

STATE	Forestry Incentives Program FY 1988/89	Colorado River Basin Salinity Control Program FY 1988/89
Alabama	$1,003	
Arizona	--	$585
Arkansas	790	
California	118	653
Colorado	14	405
Connecticut	6	
Delaware	36	
Florida	1,120	
Georgia	1,500	
Idaho	39	
Illinois	54	
Indiana	86	
Iowa	20	
Kansas	6	
Kentucky	71	
Louisiana	657	
Maine	48	
Maryland	134	
Massachusetts	40	
Michigan	91	
Minnesota	88	
Mississippi	819	
Missouri	55	
Montana	9	
Nebraska	6	
Nevada	7	560
New Hampshire	40	
New Jersey	6	
New Mexico	6	581
New York	65	
Ohio	160	
Oklahoma	95	
Oregon	524	
Pennsylvania	85	
Rhode Island	6	
South Carolina	1,148	
South Dakota	12	
Tennessee	159	
Texas	542	
Utah	--	405
Vermont	39	
Virginia	801	
Washington	371	
West Virginia	54	
Wisconsin	202	
Wyoming	59	615
Puerto Rico	21	
Total	$11,891	$3,804

FARM BILL CHANGES

Question: Mr. Secretary, the Budget that is proposed includes a decoupling provision where the farmer would be able to receive payments even though he would not plant on his land. While we have not seen the details of such a proposal, I would imagine that such idled acres would be put to conservation purposes.

Is that what you contemplate? If so, does this budget include the necessary resources to implement such a provision should Congress agree to it, or would that be contemplated in a supplemental request at that time?

Answer: Yes, we do anticipate that idled acres would be put to conservation uses. It would not be necessary to ask for a supplemental request since implementing the so-called "0/92" provision, is estimated to result in a savings.

QUESTION SUBMITTED BY SENATOR CHILES

RURAL CLEAN WATER PROGRAM

Question: Rural Clean Water Program monies have been used to initiate Best Management Practices (BMP's) in the Lake Okeechobee area of Florida to control dairy farm waste runoff. As you may know, Lake Okeechobee is one of the nation's largest freshwater lakes. The lake is currently in a hypereutrophic state because of phosphorous discharges into the lake. The Phase 1 BMP's have helped tremendously to reduce phosphorous waste coming from dairies, but there are additional BMP's that need to be implemented. It is critical that we initiate these additional BMP's as soon as possible to prevent the further deterioration of Lake Okeechobee. What is the agency planning to do this fiscal year and in FY 1988 to provide more monies for additional BMP's?

Answer: Work plans for RCWP projects are updated prior to the end of each fiscal year by the respective ASC State Committee. BMP's that are needed but not yet completed should be included in the updated plan so that the Department may consider using RCWP or ACP funds, if available, to further reduce pollutant discharges to the lake.

We are reviewing with the Florida State and County ASC Committees the possibility of expanding the RCWP into the Kissimmee River Watershed, which is adjacent to our current RCWP project. We will be glad to work with you and the Florida ASC Committees to further address specific concerns relating to additional BMP's on Lake Okeechobee.

QUESTION SUBMITTED BY SENATOR SASSER

CONSERVATION RESERVE PROGRAM

Question: Mr. Hertz, Congress, in the Food Security Act of 1985, established the amount of acreage which must be enrolled in the Conservation Reserve Program each year, for the next four years. You have stated that you believe that you will reach the minimum 15 million acres designated in 1987 with the implementation of special one-time payments to farmers who enroll their corn cropland in the program. I believe that this action may set a bad precedent for future enrollment programs. Do you foresee this as necessary in each of the next three years to reach the 40 million acre minimum established by Congress?

Answer: We have no plans at this time for offering similar incentives to producers during future CRP signups. We believe the acreage goals established in the Act are reasonable and achievable.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

DAIRY INDEMNITY PROGRAM

Question: You stated in your testimony that you believe funds appropriated for fiscal years 1986 and 1987 for the Dairy Indemnity Program will "probably be sufficient" to pay the claims of dairy farmers and manufacturers who suffered losses due to heptachlor contamination. No funds for FY 88 are requested. Would you give me a more complete report on the status of the indemnification process?

Answer: As of March, 1987 we feel that the amount of funds appropriated for the indemnity program will be sufficient to pay all manufacturers' claims received and to pay producers still remaining off the commercial market through the March production application period and most of April. However, approximately 15 to 20 producers will probably still be quarantined from the commercial market after the April production application period. At the present time, we anticipate needing approximately $1 million of additional funds in order to make monthly payments for the period May through December, 1987.

Question: Have users such as dairies that suffered huge losses, been paid, as well as farmers?

Answer: As of March 1, 1987, 14 manufacturers have received $2,853,645 and 116 producers have received $4,314,894.

Question: Since this process is continuing, and the agency isn't completely sure that the available funds will be sufficient to pay all claims, don't you believe it would be better to request some level of funding now in order to avoid further problems and delays later?

Answer: We have obtained from the respective State Departments of Health the latest test results available for herds still in quarantine, and our best projection of the amount of money needed to make remaining payments totals $1 million. We are currently considering what additional action should be taken to resolve this problem.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

CONSERVATION RESERVE PROGRAM

Question: I would like to address my next question to Mr. Hertz as it concerns the latest CRP bid. Idaho has had several problems with the latest bid. First, Oneida County requested an increase from the 25 percent per county rule, to 35 percent prior to the third bid period. The request was granted and the county placed 34 percent of the land into the program. They wanted to continue to place land into the program in the fourth bid period but were told by ASCS at the National level that they could not accept bids. Is this correct and why prohibit Oneida County from filling its amount at this time? In general what is the agency's position concerning the granting of waivers for additional lands going into the CRP?

Answer: It is correct that the Act prohibits contracting more than 25 percent of the cropland in any one county except under certain conditions. Oneida County was permitted to exceed the 25 percent of cropland rule during the third CRP signup up to 35 percent. They were prohibited from conducting a fourth signup because it is the Agency's policy, in accordance with Section 1231 of the Food Security Act of 1985, to allow a county to enroll acreage in excess of 25 percent of the cropland in that county only to the extent that the waiver request provides adequate assurance that accepting the additional acreage into the CRP will not have an adverse impact on the local economy of the county.

Question: In addition, there is one other problem that has been brought to my attention. Power County, Idaho, has several farmers who were planning to place bids under the CRP fourth bid period. They met the criteria for lands under the "old" criteria that were used prior to the fourth bid period but not the "new" criteria, that are to be used in the post fourth bid period. They were planning to bid their land into the 1988 program. After negotiating with the renters and landlord the decision was made to bid the farm for the 1988 program, thus they fertilized the crops already planted for 1987. The farmers had no way of knowing that they would not be able to bid into the 1988 program under the dual criteria. Only the "new" criteria would be allowed. The change in criteria was not known far enough in advance to allow farmers a chance to plan. I would like to know if the program can be changed to allow the dual criteria to be used for the fourth sign-up period for both the 1987 and 1988 programs. I also would like to know whether the dual criteria will be used for the September fifth period signup.

Answer: Administrative changes in procedures are under consideration which would allow producers who offered bids during the fourth signup to qualify under either erodibility criteria and to change the year of designation for the contract. We plan to publish a proposed rule in the Federal Register in the near future to effect this change for the fourth signup and the next CRP signup to be announced at a later date.

SUBCOMMITTEE RECESS

Senator BURDICK. This will end our hearing for this afternoon. Our next hearing will be held Monday, March 2, at 2 p.m. in this same room. At that time, we will hear from the representatives of the Animal and Plant Health Inspection Service, the Agricultural Cooperative Service, the Packers and Stockyards Administration, and the Office of Transportation.

Thank you, gentlemen, for coming today. The committee is now recessed.

[Whereupon, at 3:55 p.m., Wednesday, February 25, the subcommittee was recessed to reconvene at 2:00 p.m., Monday, March 2.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

MONDAY, MARCH 2, 1987

U.S. Senate,
Subcommittee of the Committee on Appropriations,
Washington, DC.

The subcommittee met at 2 p.m., in room SD-138, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Chiles, and Grassley.

DEPARTMENT OF AGRICULTURE

STATEMENT OF KENNETH GILLES, ASSISTANT SECRETARY FOR MARKETING AND INSPECTION SERVICES

ACCOMPANIED BY STEPHEN DEWHURST, BUDGET OFFICER

OPENING REMARKS

Senator Burdick. Good afternoon, ladies and gentlemen.

Today, we continue our hearings to analyze the fiscal year 1988 budget for the Department of Agriculture. In particular, we will be reviewing the budgets for the Animal and Plant Health Inspection Service, the Agricultural Cooperative Service, the Packers and Stockyards Administration, and the Office of Transportation.

With us today in order to help us with this task, we have Dr. Ken Gilles, the Assistant Secretary for Marketing and Inspection Services, Mr. Bert Hawkins, the Administrator of the Animal and Plant Health Inspection Service, Mr. Randall Torgerson, the Administrator of the Agricultural Cooperative Service, Mr. Bill Jones, the Administrator of the Packers and Stockyards Administration, and Mr. Martin Fitzpatrick, the Administrator of the Office of Transportation. Also with us today is Mr. Stephen Dewhurst, the budget officer for the Department of Agriculture.

Welcome to the subcommittee, gentlemen. We look forward to working with you as we develop the appropriations for fiscal year 1988.

The Animal and Plant Health Inspection Service is charged with protecting the country's animal and plant resources from diseases and pests in order that we maintain a strong agricultural economy. The budget proposed for fiscal year 1988 is several million dollars below that of fiscal year 1987 and contains major decreases in such programs as grasshopper control, boll weevil control, imported fire ant and animal damage control. These reductions are somewhat offset by increases in other programs.

The Agricultural Cooperative Service is designed to provide assistance in research to farmer-owned cooperatives, as well as to those who are forming cooperatives. The Agricultural Cooperative Service budget of just under $4 million is a significant decrease from the fiscal year 1987 level.

The Packers and Stockyards Administration is primarily an investigative and law enforcement agency, which is designed to assure the integrity of the markets and marketplace for livestock, meat and poultry. Its proposed budget for fiscal year 1988 of $9.4 million is up one-half of a million dollars over fiscal year 1987.

Finally, the Office of Transportation is charged with dealing with the special transportation problems that affect agriculture. For fiscal year 1988, the administration proposes to cut funding for the Office of Transportation by over 40 percent, and it also proposes to eliminate the agency at the end of fiscal year 1988.

We have statements from each of the agencies which will be included in the record in their entirety at this time. We ask that you make any comments that you need to in addition to the statements. You may proceed in any order you wish.

Are you the ringmaster, Dr. Gilles?

Dr. GILLES. Mr. Chairman, I will initiate the discussion. Subject to your admonition in our conversation earlier today, I will turn immediately to the administrators of the agencies.

I appreciate the opportunity to appear before you. As you know, Mr. Chairman, in the past 15 years, I have had the privilege of speaking on behalf of several different groups for agriculture: the Division of Agriculture; the land-grant colleges, as an agency administrator; and now as an Assistant Secretary for the Marketing and Inspection Services.

We have shared a number of concerns about providing resources and services for agriculture, which the general public needs, and which can be best provided by a coordinated national program.

I do not have a prepared statement, and I would suggest that we proceed immediately to the agencies for their presentations. The first would be the Animal and Plant Health Inspection Service, the Administrator is Mr. Bert Hawkins.

Inasmuch as the four administrators who appear before you today have been introduced in the past, we will forego a formal introduction. I would like to call on Mr. Hawkins.

[The biographical sketch of Dr. Gilles follows:]

BIOGRAPHICAL SKETCH

KENNETH A. GILLES

Dr. Kenneth A. Gilles was appointed as Assistant Secretary of Marketing and Inspection Services and was confirmed by the Senate in July 1986. He served as Administrator of the Federal Grain Inspection Service.

In his role as Assistant Secretary for USDA's Marketing and Inspection Services, he is responsible for formation and implementation of policy and procedures for the Agricultural Cooperative Service [ACS], Agricultural Marketing Service [AMS], Animal and Plant Health Inspection Service [APHIS], Federal Grain Inspection Service [FGIS], Food Safety and Inspection Service [FSIS], Packers and Stockyards Administration [PSA], and the Office of Transportation [OT].

Dr. Gilles, a native of Minnesota, graduated from the University of Minnesota with undergraduate training in Chemical Engineering and a Ph.D. degree in Agricultural Biochemistry.

Following service on a cruiser in the U.S. Navy during World War II, he worked as a research engineer with the Pillsbury Company, taught biochemistry at the University of Minnesota, then joined the Fundamental Food Research Department of General Mills.

In 1961, he became Professor and Chairman of the Department of Cereal Chemistry and Technology at North Dakota State University [NDSU]. In 1969, he became the first Vice President for Agriculture at NDSU.

Dr. Gilles served as Editor-in-Chief of "Cereal Chemistry," President of the American Association of Cereal Chemists, Chairman of the Great Plains Agricultural Council, Chairman of the Legislative Committee for the Land Grant Colleges, Fellow of American Association for the Advancement of Science, Member of American Chemical Society, Institute of Food Technologists, Sigma XI, and was active in masonic programs.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

STATEMENT OF BERT W. HAWKINS, ADMINISTRATOR

ACCOMPANIED BY:
JAMES W. GLOSSER, ASSOCIATE ADMINISTRATOR
JOHN K. ATWELL, DEPUTY ADMINISTRATOR, VETERINARY SERVICES
JAMES O. LEE, JR., DEPUTY ADMINISTRATOR, ANIMAL DAMAGE CONTROL
WILLIAM F. HELMS, DEPUTY ADMINISTRATOR, PLANT PROTECTION AND QUARANTINE
LARRY B. SLAGLE, DEPUTY ADMINISTRATOR, MANAGEMENT AND BUDGET
WILLIAM S. WALLACE, DIRECTOR, BUDGET AND ACCOUNTING DIVISION

INTRODUCTION OF ASSOCIATES

Mr. HAWKINS. Thank you.

Mr. Chairman, members of the committee, we certainly thank you for the opportunity to be here today to present our fiscal year 1988 budget. In APHIS, we have the mandate, as you so well stated, to protect America's agriculture. I have always appreciated the support and advice of this committee in carrying out that mandate.

With me to provide information in their areas of involvement, I have Dr. James W. Glosser, my Associate Administrator; Dr. John K. Atwell, the Deputy Administrator for Veterinary Services; Mr. William F. Helms, the Deputy Administrator for Plant Protection and Quarantine; Mr. James O. Lee, the Deputy Administrator for Animal Damage Control; Mr. Larry B. Slagle, the Deputy Administrator for Management and Budget; and Mr. William S. Wallace, our budget director.

APHIS MISSION

The APHIS mission, as you have said, is to protect America's agriculture. We take that mandate very seriously, because of the pests and diseases that affect many crops and animals that are grown in the United States. I feel that we have done an outstanding job in the past, but the job is getting more difficult because of the tremendous pressures placed on us by the movement of people and agricultural products.

Over 30 million people arrived at U.S. ports of entry last year, as well as millions of pounds of cargo and mail. This increasing volume and tonnage creates a sizable risk to us. Additionally, our land borders with Mexico and Canada are crossed millions of times each year.

In the past few years, we have faced outbreaks of many pests and diseases, such as citrus canker, Mediterranean fruit flies, oriental fruit flies, avian influenza, and many others.

In maintaining our adequate agricultural protection, we have a tremendous challenge, and our budget continues to contain initiatives to meet those challenges. I would like to, if I may, relate just a few of the accomplishments of the past year. One major accomplishment was the grasshopper control program.

GRASSHOPPER CONTROL

Thanks in large part to legislation passed by Congress and supported by this committee, we were able to respond quickly to grasshopper outbreaks. When the outbreaks occurred we had in place a Memorandum of Understanding with the Department of the Interior, funding was quickly available, and we effectively responded to the challenge.

We treated some 6.9 million acres last year at a cost of $11.7 million, or only $1.70 per acre. This is the cheapest that we have ever been able to accomplish this task before, demonstrating efficiency and effectiveness.

It is necessary to respond to this mounting concern about compliance with environmental regulations. Because of this, we are working jointly with other federal agencies on an integrated pest management system. We will certainly be willing to answer questions on this project.

BRUCELLOSIS PROGRAM

Another important program that we feel very pleased with is brucellosis. We have never before had such complete cooperation with so many different entities: states, industry, the affected ranchers, and the federal sector.

In this program, we have reduced the number of heavily infected states down to only eight that are in the class B and class C category and we are now in the position of having 42 states that are either class A or class free. We are pleased with that, but we are continuing to strive to improve in this program.

We feel confident that by the close of 1990, we will be in a position where more of this program can be turned over to the states and industry. Because of the progress that we are making, we are nearing the eradication of this terrible disease that has plagued us for so long.

SCREWWORM

The screwworm success story continues. We have pushed the screwworm nearly out of Mexico, and we are ready to begin work soon in Guatemala and Belize. Most importantly for this committee, we are making this progress within the funding level appropriated by the Congress. Refined techniques and operating efficiencies have made this possible.

INTERNATIONAL PROGRAMS

We continue to emphasize, as part of our international programs, the export of U.S. products. I think that through our understanding and working relationships with some of our trading partners, we have minimized many of the constraints that they had placed on us. We will continue to work in that area.

AQI PROGRAM

One area that continues to have a growing workload and gives us a lot of trouble, as I mentioned in my opening remarks, is the agricultural quarantine inspection program. We are addressing that by increasing our detector dog program, and also our x-ray detector program.

We feel that these two innovations will minimize the introduction of pests and diseases. It is questionable, however, if we can continue to have good fortune in preventing problems unless we significantly enhance our investment in agricultural protection, and our budget reflects our interest in this regard.

FISCAL YEAR 1988 BUDGET

Turning to the budget we are requesting, it totals $296 million, and is only $4 million less than Congress appropriated last year. However, we have made adjustments in the program mix to allow for two major initiatives.

The first is one that I have been speaking of and which calls for an increase of $9.7 million for our basic agricultural protection effort, the agricultural quarantine inspection program. This increase is necessary because of the increased risks that we spoke of.

As a point of reference, I would ask you to consider the fact that the program workload has doubled since 1981, but the resources that have been available to us, have remained essentially the same in terms of real dollars. The budget this year includes the first sizable request for increased money that we have made over this period of time.

BIOTECHNOLOGY

Our second major initiative involves the regulatory responsibility in the biotechnology field. Biotechnology is a burgeoning industry that has great potential to help American agriculture, but careful regulation is essential to assure public support and to protect the environment.

We anticipate literally thousands of applications from the agricultural biotechnology industry and we have to be ready to promptly and properly evaluate the applications as they are submitted to us. We are requesting $4 million in this fiscal year to develop a staff of high-quality, multidisciplinary individuals to assist us in this effort. Also, we recently signed a Memorandum of Understanding with the Agricultural Research Service to use its scientific expertise to assist us in evaluating certain of these organisms.

We have proposed some other decreases, which I will not address now, but my colleagues and I will be glad to answer any questions.

PREPARED STATEMENT

This concludes my remarks and I will ask that my prepared statement be submitted for the record.

Senator BURDICK. Without objection, it will be received.

[The statement and new biographical sketch of APHIS follow:]

STATEMENT OF BERT W. HAWKINS

Mr. Chairman, members of the Committee, I am very pleased to have this opportunity to report to you on the accomplishments and plans of the Animal and Plant Health Inspection Service (APHIS). We have worked hard to fulfill our mandate to protect America's food supply and we appreciate the support and advice of this Committee. Without the protection we strive to provide, wholesome and affordable food would be beyond the reach of many Americans and millions throughout the world. Recognizing that, I am especially proud of APHIS and its work. With me today are Dr. James W. Glosser, our Associate Administrator; our Deputy Administrators for Veterinary Services -- Dr. John K. Atwell, for Plant Protection and Quarantine -- Mr. William F. Helms, for Animal Damage Control -- Mr. James O. Lee, Jr., and for Management and Budget -- Mr. Larry B. Slagle; and the Director of the Budget and Accounting Division -- Mr. William S. Wallace. They are prepared to deal with questions in their area of expertise.

Agricultural Protection

When people talk about the many activities inherent in the agricultural industry, you hear terms such as production, marketing, transportation, and conservation. Some USDA agencies have such words in their names. But you do not often hear the word protection. Protection is what APHIS is all about, and most agricultural activities assume that an adequate level of protection exists. This is not the case in most countries, many of which live daily with foot-and-mouth disease, Mediterranean fruit flies, or African swine fever, problems that we regard as virtually unthinkable in the United States. There are two basic reasons why we cannot allow such problems. One is the importance of agriculture and related industries to our economic health. Agriculture is the most important industry in this country. As this Committee noted last year, 21 million jobs are dependent upon agriculture. In a time of a serious trade deficit, agricultural exports still total $28 billion. Keeping out exotic organisms helps American farmers compete in world markets by lowering production costs. The second basic reason is that agricultural protection ensures the food supply for our nation. An abundant supply of healthy animals and plants provides Americans with the best and most reasonably priced dinner table in the world. Agricultural protection helps all Americans, not just those directly involved in the industry.

Increasing Threat

We are proud of the job we have done in providing protection, but we are also concerned about the future. The volume and speed of international travel has increased dramatically over recent years, putting the United States at an ever increasing risk from the many pests and diseases prevalent throughout the rest of the world. The same volume and speed factors apply to travel within the United States, increasing the threat of rapid dissemination once foreign pests and diseases have entered the country. We have already seen the costs of such problems. The Federal Government and the State of California spent more than $120 million to eradicate a Mediterranean fruit fly outbreak. USDA spent $64 million to control avian influenza. Florida and USDA have spent over $30 million to date combating citrus canker. Newcastle disease outbreaks have cost the Federal Government over $55 million. While these figures are alarming, they could easily have been much worse if we had not detected these problems early and acted quickly to control them. Additionally, we have been able to handle other pest and disease introductions, such as Oriental fruit fly and khapra beetle, before they reached such dangerous and costly levels.

Serious concern about apparent increasing holes in our agricultural protection safety net led us in 1985 to convene a blue ribbon panel of experts to review our efforts and make recommendations. We have begun to implement some of the recommendations and our budget for FY 1988 proposes much stronger action to reinforce our defense against pests and diseases. I am determined to improve our basic capability to prevent the entry of pests and diseases and slow the dissemination of these problems when they occur, thus avoiding much more costly expenditures at a time when neither our agricultural or national economies can afford them. Agricultural protection means dealing with problems we already have. We pledge to continue our efforts on a wide range of programs from brucellosis to gypsy moth. Our budget reflects this intent.

I am equally determined to keep APHIS on top of its duties in the burgeoning field of biotechnology. A whole new industry is ready to explode upon the scene, one which has the potential to greatly benefit American agriculture. We must be in a position to help encourage the industry's growth, but also to ensure that agricultural protection is not endangered.

Accomplishments

I would like to take a few minutes to report on some of our most outstanding accomplishments. The 1986 grasshopper control effort was the second largest in history, and certainly the smoothest, thanks to appropriations and other legislation provided by the Congress. We treated 6.9 million acres at a cost of $11.7 million. Although we were pleased with the success of last year's program, we see the need to develop better methods to control grasshoppers. The high cost, coupled with environmental concerns, makes continual, massive pesticide applications an uncertain tool for the future. Accordingly, we are joining with the Agricultural Research Service, the Economic Research Service, the Forest Service, the Environmental Protection Agency, the Bureau of Land Management, the Fish and Wildlife Service, and the National Park Service to initiate integrated pest management trials. We will keep you informed of our findings during this five-year project. We will also continue our regular control operations in 1987.

Our boll weevil programs achieved great success last year. In the Southeast program, we have now eradicated the boll weevil from North Carolina and South Carolina to a buffer-zone along the Georgia border. We have already seen the payback begin for the investment made by APHIS and the growers, who pay 70 percent of the program's operating costs. One study showed that lint yields increased by 50 to 55 pounds per acre in the eradicated areas of North Carolina, with a reduction of $28 per acre in production costs. In the Southwest program, the number of weevils trapped was reduced by over 95 percent, reflecting solid progress. Both of these programs demonstrate how domestic eradication programs can work best - with the combined commitment of industry, the States, and APHIS.

Turning to the animal health side, the brucellosis program continues its steady progress. The Market Cattle Identification reactor rate dropped from .26 in FY 1985 to .23 in FY 1986, and the number of infected herds was reduced by 25 percent. Forty-one States, Puerto Rico, the Virgin Islands, and the District of Columbia are now in Class Free or Class A status. We are concentrating our resources in the high incidence States as we move toward our goal of having all States in Class A or better status by 1991.

We are happy to report progress in the animal welfare program. This program is often controversial and is a difficult one to conduct, but we moved in FY 1986 to improve our capability in this area. Training efforts were enhanced substantially, helping our veterinarians better understand and carry out their duties under the Animal Welfare Act. We are gratified that a recent General Accounting Office study praised our advancements in the program and we believe that we have made the best possible use of the funds Congress provided.

An important facet of agricultural protection is pushing pests and diseases an optimal distance from our borders. That has been the guiding principle in the screwworm and Mediterranean fruit fly programs in Mexico and Guatemala. The screwworm program has been extraordinarily successful in the past few years. Combining improved techniques and tools with a geographic area more favorable for program operations, we have pushed the screwworm out of nearly all of Mexico and have signed an agreement with Guatemala to begin operations there. Each mile of progress beyond the currently protected area means more protection for the United States. Also, we are very pleased to report that program efficiencies have allowed us to make more progress than expected without any additional funding. We have done this keeping in mind the direction by Congress to move forward, as possible, within existing appropriations.

During FY 1986, we continued to hold our success in the Mediterranean fruit fly program in Mexico and Guatemala. Further progress in this area will be made in 1987 as we plan to move the protected area southward in Guatemala. The Central America Medfly Program - CAPMED - offers the prospects of Medfly eradication throughout Central America. We sent the Committee a report on this program in 1985 and we are working closely with the Food and Agriculture Organization, the Agency for International Development and several other nations to consider whether a multinationally - funded program could or should be launched. We will continue to keep you informed on this vital program.

We have worked hard during the past year to fill our role in the Federal Governmentwide effort to deal with biotechnology. Our role is in the regulatory area as part of an Environmental Protection Agency - Food and Drug Administration - U.S. Department of Agriculture team approach. Our first few brushes with regulating this new industry have demonstrated the need for a multidisciplinary, high quality staff of specialists and we have established one. Many of the positions are now filled, and we will quickly move to complete the staff.

One last accomplishment I would like to mention is the successful transfer of animal damage control responsibilities from the Fish and Wildlife Service. A team of APHIS personnel, working closely with their counterparts from Fish and Wildlife, completed the enormous administrative task of transferring people, records, equipment, and funds. The transfer required literally hundreds of individual tasks, and their successful completion is a tribute to the cooperation of all who were involved.

FY 1988 Budget

Now I would like to turn to our FY 1988 current law budget request. The budget, while in total very close to our FY 1987 appropriations, contains some significant changes. I spoke of our very serious concerns with the need to improve the nation's level of basic agricultural protection, to push pests and diseases further away from our borders, and to fulfill our role in regulating the biotechnology industry. These concerns are addressed in the budget request.

Our continuing commitment to many pest and disease programs is addressed in the budget as well. In order to help offset the costs of these high priority increases, we have proposed decreases in programs where we have achieved our goals substantially or totally, where we believe the States and industry are ready to assume greater responsibilities, and where further APHIS efforts are not cost-effective. These thoughts were used as a guide in forming the specifics of our request, which I would now like to discuss with you.

Our request under current law totals $296,266,000, a decrease of $4,701,000 from our FY 1987 appropriation for "Salaries and Expenses." This includes $11,805,000 to cover the annualization of costs due to the new Federal Employees Retirement System and the Federal pay adjustment. We are also requesting $2,347,000 for our "Buildings and Facilities" appropriation, an amount equal to our appropriation in FY 1986 before the Gramm-Rudman-Hollings sequestration.

We are proposing a program increase of $9,728,000 for the Agricultural Quarantine Inspection - AQI - program. The magnitude of this proposal reflects the magnitude of our concern over our current capability to provide an adequate level of protection for American agriculture. Thirty-two million air passengers entered the United States in FY 1986, a 2 million increase over FY 1985. Looking at the situation over a five-year period is even more revealing. From 1981 to 1986, air passenger inspections doubled. Cargo inspection increased 32 percent, as did the number of plant units processed. Well over $200 million was spent on exotic pest and disease outbreaks. Accelerated inspection systems now used by the Customs Service increase the need for agricultural inspections.

We have tried to cope with this overwhelming task by utilizing X-ray machines and detector dog teams, and by placing additional inspectors at the highest volume ports of entry. Funding, in terms of buying power, has remained constant over the same time, despite the ever-increasing demand. Every additional passenger or vehicle entering the United States increases the threat to

U.S. agriculture and it is up to APHIS to maintain adequate protection. We believe that we cannot wait any longer to increase our investment in agricultural protection by hiring more AQI inspectors, by expanding the X-ray and detector dog programs, and by improving public awareness of the dangers of transporting pest and disease risking items.

For our role in biotechnology we are requesting a new line item totaling $4,000,000. This would cover the cost of the staff I spoke of earlier and the costs associated with issuing licenses and permits for testing and using biotechnologically derived products. This regulatory function has been assigned to APHIS, consistent with our traditional role as a regulatory agency. Although the biotechnology industry is in its infancy, permit applications are expected to increase from 50 in 1987 to 3,000 or more in 1989. We have to be ready to deal with this workload. Failure to handle applications expeditiously will seriously endanger confidence in the Department's ability to regulate the industry. Delays could force the industry to develop its products abroad, with a substantial loss to our economy, and delay the transfer to American agriculture of these technological advances. It is crucial that we do our part and do it well and promptly.

The other program increases we are proposing reflect other facets of our protection role. In the case of Mediterranean fruit fly and foot-and-mouth disease, we need to increase activities to push potentially devastating problems further away from our borders. With respect to foot-and-mouth disease, we plan for increased activity in Colombia to push infection beyond the Magdalena River. When this goal is achieved, Colombia will have sufficient incentive to carry out and finance a nationwide eradication program and thus limit the need for further U.S. involvement. Likewise, in the witchweed program we believe that a few years of intensified efforts will adequately reduce the problem to a level easily handled by the States and allow us to end Federal financial participation. For the animal health compliance and enforcement program, we are proposing a program increase of $500,000 to increase market inspections. As in the case of AQI, this is a response to a tremendous increase in the volume and speed of trade. This program is the key to quickly tracing disease sources and is vital in providing a quick response when outbreaks occur.

Decreases

While we have identified several areas requiring increased expenditures, we are not unmindful of the continuing need to restrain overall spending to help meet the deficit reduction targets contained in the Gramm-Rudman-Hollings Act. We identified three general guidelines for recommending possibilities for spending reductions. These were programs where successful goal completion or progress called for reduction; programs in which States and industry should take a larger share of responsibilities; and programs where uncertainty makes it unwise to commit higher levels of funding.

Based on actual or anticipated program successes, we are able to propose reduced funding for brucellosis, boll weevil as described earlier, and pseudorabies, where we have completed the pilot projects. We believe that States or industry should assume total responsibilities for the imported fire ant and noxious weeds programs because of our lack of a widescale control tool for fire ants and the localized nature of noxious weeds problems. Based also on the principle of a more appropriate share for States and industry, we are proposing reductions in the animal welfare, animal damage control, and pink bollworm programs. We still plan to fulfill the Federal role in these programs.

The other areas of reduction involves the contingency fund and grasshopper control fund. Congress provided substantial appropriations for both in FY 1987. The contingency fund appropriation reflected the uncertainty surrounding the citrus canker and avian influenza problems, while the grasshopper appropriation reflected the abnormally high control needs of the past two years. We now have a better handle on these situations and believe that it would be unwise to continue to tie up scarce appropriations when more pressing needs exist.

One other proposal to help relieve the budget squeeze is in the area of user fees. We are proposing $85,876,000 in new user fees to offset the costs of certain APHIS activities, including the AQI program. This is consistent with the view that beneficiaries of Federal services should bear the costs.

Mr. Chairman, in summary let me emphasize again that agricultural protection is essential to a strong economy and a stable food supply. We have budgeted accordingly and taken steps already to assure that American agriculture and the American food consumer can continue to assume an adequate level of protection. Our number one goal is to provide that protection and prevent the costly pest and disease outbreaks that threaten to hit us at any time.

I would like again to thank the Committee for its continued support and I would be happy to answer any questions you may have.

BIOGRAPHICAL SKETCH

William F. Helms

William F. Helms was appointed Deputy Administrator, Plant Protection and Quarantine program, on August 17, 1986. He was born in Andalusia, Alabama, on April 7, 1934. Mr. Helms earned a Bachelor of Science degree from Auburn University in 1956.

After graduation from the university he began his career in USDA with the Agricultural Research Service. His first assignment was in south Alabama. Following 2 years of military service, he returned to ARS in 1959 as an inspector and served at two locations in Alabama working on the imported fire ant, whitefringed beetle, phony peach disease, and other programs. In 1964, he moved to Greenville, Mississippi, and was involved in the Determination of the Impact of Pesticides Program. In early 1968, he moved to the Jackson, Mississippi, State Supervisor's office as a staff specialist for imported fire ant control programs. In late 1968, he moved to Lubbock, Texas, as District Supervisor with primary responsibility for operation of the Texas High Plains Boll Weevil Control Program. In 1972, he returned to Jackson, Mississippi, as State Supervisor with responsibility for program actions in Alabama and Mississippi under the new Plant Protection and Quarantine (PPQ) program of the

Animal and Plant Health Inspection Service (APHIS) of USDA. In 1978, he moved to San Antonio, Texas, as Area Director with responsibility for program administration in Texas, Oklahoma, and Arkansas. In 1976, he became the Chief Staff Officer for the Pest Program Development Staff, National Program Planning Staff of PPQ, in Hyattsville, Maryland. He was appointed Assistant Deputy Administrator, PPQ, in 1980 and became Associate Deputy Administrator in 1981.

Mr. Helms has been an active member of several State entomological societies and is a member of the Entomological Society of America.

AGRICULTURAL COOPERATIVE SERVICE

STATEMENT OF RANDALL E. TORGERSON, ADMINISTRATOR

ACCOMPANIED BY:

JACK ARMSTRONG, DEPUTY ADMINISTRATOR

BILL WALLACE, DIRECTOR OF BUDGET AND ACCOUNTING DIVISION

INTRODUCTION OF ASSOCIATES

Senator BURDICK. The next player.

Dr. GILLES. The next agency that will be making a presentation is the Agricultural Cooperative Service. Its Administrator is Mr. Randall Torgerson.

Mr. TORGERSON. Thank you, Mr. Chairman.

We appreciate the opportunity of appearing before you to present the budget for the Agricultural Cooperative Service.

With your permission, I would like to identify my associates here with me today. Dr. Jack Armstrong, Deputy Administrator, and Bill Wallace, Director of Budget and Accounting Division of the Animal and Plant Health Inspection Service.

With your permission, Mr. Chairman, I would like to briefly highlight my testimony, which we are submitting for the record.

ACS ASSISTANCE TO COOPERATIVES

The Agricultural Cooperative Service is the Department's focal point in providing research, analysis, and technical advisory assistance and education to farmer-owned cooperatives and to groups of farmers wishing to organize new cooperatives throughout the nation.

ACS operates as an independent agency carrying out major functions assigned to it by the Secretary. Activities and services of the agency closely follow the language and spirit spelled out by Congress in the Cooperative Marketing Act of 1926.

In our program of activities, we help existing cooperatives improve their efficiency and effectiveness of operations, and assist new cooperatives to get a good start. The agency's program has five basic parts: (1) technical assistance, (2) new cooperative development, (3) research, (4) collection of cooperative statistics, and (5) cooperative education and information.

A total of 5,625 marketing, farm supply, and related service cooperatives were operating in 1985, with combined sales of $65.6 billion. Cooperative memberships were 4.8 million, indicating that many farmers belong to more than one cooperative. As a reflection of the general economic difficulties in the agricultural sector, the number of cooperatives reporting losses increased during the last year.

Since cooperatives are integrally linked to the well-being of their farmer members, this poor performance reflects continued difficulties in production agriculture. Nevertheless, producers continue to look to their cooperatives, as well as to other forms of group action, to be efficient and effective in representing their interests in the marketplace.

The number of mergers, consolidations and dissolutions has increased, and is reflected in the decrease of 157 cooperatively owned businesses between 1984 and 1985.

During the past year, the agency provided technical assistance to 95 cooperative and producer groups through 70 separate projects. Forty-three of these projects involved emerging or developing cooperatives that served a total membership of nearly 6,000 producers.

Upward of nearly 30 commodities were represented in the mix of projects that were involved, and ranged all the way from assisting cooperatives in evaluating cottonseed processing to cooperatives assisting Native American handicraft producers, fruit and vegetable growers, animal and livestock marketing groups, dairy cooperatives, and others.

In addition, the agency, at the direction of the Senate Agriculture Appropriations Subcommittee, is conducting a major study on "what cooperatives need to do to remain viable businesses and increase returns to producer-members."

The agency's research program provides timely and relevant information to managers and directors of the nation's cooperatives.

Results of our ACS research and technical assistance activities are highlighted in our monthly magazine, "Farmer Cooperatives," which is now in its 52nd year of publication. This publication is aimed at directors and managers of cooperative associations, more than 90 percent of which have annual sales of less than $15 million. They are truly small businesses that are found in rural communities throughout the nation.

To conduct our agency's activities, Mr. Chairman, during fiscal year 1988, we have a ceiling of 64 staff years. The ACS budget request for fiscal year 1988 is $3,722,000, which is $857,000 less than the agency's fiscal year 1987 budget level.

PREPARED STATEMENT

That concludes my brief highlights, Mr. Chairman. I will be happy to respond to any questions that you may have.

Senator BURDICK. Thank you.

[The statement follows:]

STATEMENT OF RANDALL E. TORGERSON

I appreciate the opportunity of appearing before you to present the budget of the Agricultural Cooperative Service. First, I want to introduce my associates who are with me today -- Dr. Jack Armstrong, Deputy Administrator, Agricultural Cooperative Service; and William Wallace, Director, Budget and Accounting Division, Animal and Plant Health Inspection Service.

The Agricultural Cooperative Service (ACS) is the Department's focal point in providing research, analysis, technical assistance and education to farmer-owned cooperatives and groups of farmers wishing to organize new cooperatives throughout the Nation. ACS operates as an independent agency carrying out major functions assigned to it by the Secretary. Activities and services of the Agency closely follow the language and spirit spelled out by Congress in the Cooperative Marketing Act of 1926.

Agency Missions

The Agricultural Cooperative Service performs research and policy analysis on cooperative related issues and is the primary supplier of services to farmer cooperatives. We help existing cooperatives improve their efficiency and effectiveness of operations and assist new cooperatives to get a good start. We provide service and information to bring about more effective cooperative operations in support of the farm family ownership structure.

The Agency's program has five basic parts: (1) technical assistance, (2) new cooperative development, (3) research, (4) collection of cooperative statistics, and (5) cooperative education and information.

The Importance of Farmer Cooperatives

A total of 5,625 marketing, farm supply, and related service cooperatives were operating in 1985, with combined sales of $65.6 billion. This is a sales decrease of 10.2 percent from 1984, and net margins of all cooperatives declined 23.1 percent to $775 million. Total assets were $27.8 billion and member and patron equity $12.1 billion. Member equity financed 43.4 percent of total assets, up from 41.7 percent in 1984. Cooperative memberships were 4.8 million, indicating many farmers belong to more than one cooperative.

As a reflection of general economic difficulties in the agricultural sector, the number of cooperatives reporting losses were 702 in 1983, 984 in 1984, and 930 in 1985 or 12, 17, and 17 percent of all cooperatives respectively. Since cooperatives are integrally linked to the well-being of their farmer members, this poor performance reflects continued difficulties in production agriculture.

Producers continued to look to their cooperatives to be efficient and effective in representing their interests in the marketplace. To accomplish this, boards of directors and managers have taken steps in many situations to make changes internally and to even consider structural alignments with other cooperatives or businesses. The number of mergers, consolidations and dissolutions has increased and is reflected in the decrease of 157 cooperatively owned businesses from 1984 to 1985. The Agricultural Cooperative Service is involved in a number of such adjustment studies throughout the country to assist producers in evaluating their alternative courses of action.

Overview of Research and Technical Assistance Activities

You may ask, and rightfully so, what are we in ACS specifically doing to assist the farmer cooperative sector. During the past year the Agency provided technical assistance to 95 co-ops and producer groups through 70 separate projects. Forty-three of these projects involved emerging or developing co-ops, serving a total membership of more than 5,900. Upward of 30 different commodities were represented in these projects: There were examinations of cottonseed processing costs at 14 cooperative plants; an assessment of the feasibility of merging 3 dairy cooperatives in the Midwest and intermountain states and 2 prune drying cooperatives in California; assistance in evaluating the feasibility of establishing marketing cooperatives for three groups of Native American handicraft producers and 12 groups of vegetable producers; assessment of the future of live animal marketing cooperatives; aid in developing marketing and other member services for a federation of 14 local southeast U.S. vegetable marketing cooperatives; an analysis of financial and operational alternatives for a west coast cottonseed processing cooperative; and, assistance in identifying cooperatives eligible for stripper oil well overcharge refunds, saving them $45 million. Projects involved cooperatives located in 33 states.

In addition, the Agency, at the direction of the Senate Agricultural Appropriations Subcommittee, is conducting a major study on "what cooperatives need to do to remain viable businesses and increase returns to producer-members." Emphasis is on principles, practices, philosophy, and systems that strategically position cooperatives as effective instruments for their members. The first phase of the sudy is well underway and involves identification of a range of present and alternative practices and strategies available to cooperatives, and criteria by which these elements can be evaluated. The second phase will bring leaders from the agricultural and business sectors together to evaluate the effectiveness of the alternatives against the identified criteria. In addition to satisfying the Senate directive, the end product of this study is intended to provide a set of guidelines of use to cooperative directors and managers as they contemplate new directions for their cooperative organizations.

The Agency's research program provides timely and relevant information to the managers and directors of the Nation's cooperatives. Examples of research accomplishments in 1986 included: an analysis of reserve balancing pool for services by dairy cooperatives; the role of livestock marketing cooperatives; a financial profile of the largest cooperative organizations; use of export management companies by cooperatives; an analysis of director liability in farmer cooperatives; and examination of cooperative operations in grain, petroleum, farm supplies, potatoes, dairy, wool, fish, and fruit and vegetables.

The findings and recommendations of these research projects assist cooperatives in improving operations and services provided to members. The Agency continually evaluates and updates research plans, so that the most pressing issues of concern to cooperatives are addressed. Currently 72 research projects are underway. A number of these projects are undertaken through cooperative research agreements with land grant universities.

Results of ACS research and technical assistance work are highlighted in the monthly Farmer Cooperatives magazine, now in its 52nd year of publication. This publication is aimed at directors and managers of cooperative associations, more than 90 percent of which have annual sales of less than $15 million. They are truly small businesses that are found in rural communities throughout the Nation.

ACS has nearly completed the process of automating our analytical and administrative functions. This has helped us to achieve our objectives more efficiently. To conduct our Agency's activities during FY 1988, we will have a ceiling of 64 staff years.

The ACS budget request for FY 1987 is $3,722,000 which is $857,000 less than the Agency's FY 1987 level. Our FY 1988 budget proposes the following changes:

> A reduction of $1,000,000 for research for cooperatives in dairy, crops and cooperative management. In addition research on aid to new and existing cooperatives will also be reduced. ACS also will begin charging user fees for its publications at the beginning of FY 1988. The Agency has this authority, when delegated by the Secretary, under the Food Security Act of 1985. This user fee may save $300,000 of appropriated funds under current law. An increase of $20,000 to annualize 1987 pay costs and to restore pay costs absorbed in 1987 and an increase of $123,000 to fund increased costs associated with the new Federal Employees Retirement System.

A shift of the ACS program to be totally funded through user fees. Legislation has been prepared to provide for the beneficiaries of the Agency's services to pay for them. · A system of charges is being developed.

As soon as legislation is passed and our proposed user fee plan is approved we will initiate these programs.

Mr. Chairman, I thank you for the opportunity to present this statement. We will be glad to respond to any questions.

PACKERS AND STOCKYARDS ADMINISTRATION

STATEMENT OF B.H. (BILL) JONES, ADMINISTRATOR

ACCOMPANIED BY CAL WATKINS, ASSISTANT TO THE ADMINISTRATOR

OPENING REMARKS

Dr. GILLES. The third presenter will be Mr. Bill Jones, the Administrator of the Packers and Stockyards Administration.

Mr. JONES. Thank you, Ken.

First let me recognize Cal Watkins, my associate, who is in charge of the budget work for the administration.

Mr. Chairman, you adequately explained the functions of the agency in your opening remarks. This past year, the agency was also delegated the "Clear Title" responsibilities which were given to the Secretary under section 1324 of the Food Security Act of 1985.

FINANCIAL PROTECTION

The financial plight of agriculture has continued to plague the livestock and meat marketing sectors of the industry. Under these circumstances, it is particularly important for the stability of the farm economy for livestock producers to receive payment for livestock when they are marketed.

During fiscal year 1986, we had nine auction markets fail financially, 47 order buyers and dealers, and I think the subcommittee will be particularly interested in developments in the packing house industry. During fiscal year 1986, 27 meatpackers failed financially. This number and the number in 1985 of 20 were significantly above the previous years and indicate the serious pressure under which the packing house industry is now working.

During fiscal year 1986, cash sellers of livestock were paid $2.2 million from 23 packers under the statutory packer trust provision of the act. This brings the total paid to cash sellers to over $29.5 million since the adoption of the trust in 1976. This bears out the wisdom of the Congress in adding this provision to the act. I might say here that Senator Grassley had an active part in accomplishing that when he was on the House side.

MEAT AND POULTRY MARKETING

The livestock, meat, and poultry production and marketing are undergoing significant change. Fortunately, the P&S Act is written in such a manner as to allow the agency to continually review and update its programs and priorities to meet the needs of the changing industry.

Effective April 1, 1986, P&SA realigned its packer and poultry division. The poultry and red meat were merged together. This change was made in light of the merging of the poultry and livestock and meat industries, particularly at the processing and distribution levels.

The transfer of ownership and control of red meat and poultry firms has resulted in the firms themselves becoming participants in the same competitive arena, in addition to the traditional competition of the products in the retail and HRI trade. In addition to the processing and distribution sector, several of the largest hog farrowing and production operations in the nation are tied directly to large poultry firms.

The Congress should be alert that the merging of the poultry and livestock/meat industries is resulting in different rules of the game now being applied to firms competing in the same market arena.

FURTHER PROCESSING

Mr. Chairman, going on to the latest, really, in the industry, the name of the game today in meat is "further processing." This term includes fabrication beyond wholesale cuts in the case of red meat, and beyond the whole bird in the case of poultry. It includes portion control, that is cutting individual portions, manufacture of specialty convenience, and partially to fully cooked products, ready-to-serve products, and the like.

The poultry industry got the jump on red meats, but the movement is well underway now in beef, pork, and lamb. These developments have far-reaching implications from the production of live animals through to consumption. The agency will keep abreast of the changes and modify its programs and priorities in accordance therewith.

GRADE AND WEIGHT

In the area of grade and weight selling, the agency continues to monitor livestock procurement by packers on a carcass-weight or carcass-grade-and-weight basis.

The agency has completed its investigative study involving the nation's major lamb slaughtering plants. The study showed that local live markets are generally competitive, given the limited volume of slaughter lambs marketed.

The study did evidence certain procurement problems, such as settlement and final payment not being made on actual hot carcass weights, not maintaining individual carcass identity, and failure to give full and true accounting to sellers. P&SA will work with the industry to correct the problems.

CLEAR TITLE

This is the first year that the agency is to report to Congress with respect to its activities under section 1324 of the Food Security Act of 1985. The responsibilities given to the Secretary were delegated to the Administrator of P&SA in February 1986. These responsibilities are limited to developing and publishing regulations and to certifying central filing systems set up by the states.

Final regulations were published on August 18, 1986. As of today, 10 states have applied for certification. The 10 have been certified and no other applications are pending at this time.

BUDGET REQUEST

With this, Mr. Chairman, we now turn to the budget for fiscal year 1988. The total amount, as you stated in your opening statement, for the agency is $9,423,000. Included is $9,295,000 for the administration of the Packers and Stockyards Act, and $128,000 for clear title.

The net increase includes $262,000 for administration of the Packers and Stockyards Act, and an increase of $2,000 for implementation of clear title, making it a total of $128,000 for clear title.

PREPARED STATEMENT

The agency appreciates this opportunity to present our statement, Mr. Chairman, and we will be glad to answer any questions that you may wish to ask.

Senator BURDICK. Thank you.

[The statement follows:]

STATEMENT OF B.H. (BILL) JONES

I appreciate the opportunity to appear before the Subcommittee to discuss the programs of the Packers and Stockyards Administration (P&SA) and the Agency's budget request for fiscal year 1988. First, may I introduce my associate, Calvin W. Watkins, who is in charge of the Agency's budget work.

First, I would like to briefly outline the programs of the Agency. The basic responsibility of the Packers and Stockyards Administration is to enforce the Packers and Stockyards Act of 1921, as amended. The Agency is primarily an investigative and law enforcement agency, and much of what the Agency does can be properly classified as combating white-collar crime.

This past year the Agency was also delegated the "clear title" responsibilities given to the Secretary under Section 1324 of the Food Security Act of 1985.

Programs under the P&S Act are designed to assure the integrity of the livestock, meat, and poultry markets and the marketplace. This includes assuring payment, fostering fair and open competition and guarding against unfair, deceptive and other fraudulent practices in the marketing of meat animals and products therefrom.

The financial plight of agriculture has continued to plague the livestock and meat marketing sectors of the industry. Under these circumstances, it is particularly important to the stability of the farm economy for livestock producers to receive payment for livestock when marketed.

Financial problems of firms subject to the Act have forced the Agency to allocate additional resources and give special priority to the financial area. During fiscal year 1986, nine auction markets failed financially leaving $810,000 unpaid for livestock, based on the bond claims filed. During the last fiscal year, 47 dealers/order buyers failed financially leaving $1.5 million unpaid for livestock, based on the bond claims filed.

The Subcommittee will be particularly interested in developments in the meat packing industry. During fiscal year 1986, 27 meat packers failed financially. This number and the number during fiscal year 1985 (20) are significantly above those of previous years.

During fiscal year 1986, cash sellers of livestock were paid $2.2 million from 23 packers, under the statutory packer trust provision of the Act. This brings the total paid to cash sellers to over $29.5 million since the adoption of the trust in 1976. This bears out the wisdom of the Congress in adding this provision to the Act.

Livestock, meat, and poultry production and marketing are undergoing significant change. Fortunately, the P&S Act is written in such a manner as to allow the Agency to continually review and update its programs and priorities to meet the needs of the changing industry.

Effective April 1, 1986, P&SA realigned its Packer and Poultry Division. The poultry and red meat work were merged together into three branches: Procurement, Financial and Merchandising. This change was made in light of the merging of the poultry and livestock and meat industries, particularly at the processing and distribution levels.

The transfer of ownership and control of red meat and poultry firms has resulted in the firms themselves becoming participants in the same competitive arena, in addition to the traditional competition of the products in the retail and HRI (hotel/restaurant/institutional) trade. In addition to the processing and distribution sector, several of the largest hog farrowing and production operations in the Nation are tied directly to large poultry firms.

The Congress should be alert that the merging of the poultry and livestock/meat industries is resulting in different "rules of the game" being applied to firms competing in the same market arena.

AGENCYWIDE INFORMATION MANAGEMENT SYSTEMS (AIMS)

The Agency has continued to make progress in implementing its automated information management system. The enhancement of the system will enable P&SA to automatically process and evaluate annual reports submitted by over 8,200 packers, market agencies and livestock dealers.

The expanded system will assist in pointing the work of the Agency in the direction of emphasizing surveillance as opposed to "mopping up" after violations have occurred, particularly in the financial areas. In addition, the system will contribute greatly to refining the management process by developing meaningful measures of productivity and, also, in allocating staff and funds.

AIMS includes six modules: Registration, project management, annual reports, industry surveillance, case history tracking, and planning and budgeting. The registration module should be operational by the end of this fiscal year. The first phase has been completed in the industry surveillance module, and also, in the case history tracking module.

SCOPE OF OPERATIONS

The production and marketing of livestock, meat and poultry is of significant importance to the economy and meat represents the most important single food source. The dollar values previously used by the Agency to indicate this standing have been adjusted downward to reflect the economic pressures which have been exerted on the farm economy. Producer receipts at $46 billion are 1 billion lower than the previous $47 billion. Market value added to slaughter processing and wholesaling at $12 billion are also $1 billion lower and the total value of all red meats and poultry at wholesale at $58 billion is down $2 billion from the previous $60 billion.

Currently, under the Act, there are 1,800 posted stockyards; 9,800 registrants, including 7,000 market agencies/dealers and 2,800 packer buyers; approximately 6,000 slaughtering and processing packers; and an estimated 6,500 meat distributors, brokers, and dealers. There are also approximately 250 poultry firms subject to the Act.

The programs of the Agency under the Act are divided into two major areas: Livestock Marketing and Packer and Poultry. The goal of the Agency under normal circumstances is to allocate its resources on approximately a 50/50 basis between the two programs. Flexibility to reallocate resources between the two must be maintained, however, in order to respond to problems when they occur. As previously stated, the current financial situation in the industry has demanded that additional resources be channeled to financial and payment program activities.

LIVESTOCK MARKETING

The focus of the Livestock Marketing program is on payment protection, fraudulent schemes, false weighing, and trade practices of stockyards, market agencies, and dealers. Major emphasis is given to payment protection and investigating fraudulent marketing practices. This emphasis will be continued in work planning and allocation of the Agency's resources.

Fraudulent practices include misuse of custodial funds and other custodial account violations; check kiting; false weighing; weight and price manipulation; switching of livestock; misrepresentation as to the quality, source, origin and health of livestock; market agents defrauding principals; and altering books and records.

The Agency is endeavoring to make its payment protection work more effective by allocating additional resources to surveillance. This effort has been hampered, however, by the rash of financial failures occurring in the industry.

Fostering and maintaining fair and effective competition in the industry is another program activity being given high priority. Any practice, agreement, or understanding which excludes a potential buyer from bidding in open competition either in direct trading or at public markets is a restraint of competition. Investigations often disclose practices which result in the lessening of competition through apportioning of territories, price agreements or arrangements not to compete, and payoffs or kickbacks to buyers.

PACKER AND POULTRY

The primary responsibilities of the Packer and Poultry Division are to assure prompt and full payment to producers and ensure open and free competition in the procurement of livestock by packers and in the marketing of meat and poultry. Packer and poultry activities continue to place high priority on the effective payment protection for sellers of livestock through bonding, solvency tests, and the statutory trust. The existence of the packer trust has helped substantially in reducing losses to producers who sell livestock on a cash basis to slaughtering packers.

Dramatic changes have occurred in the meat packing industry over the last few years. In addition to the merging of the specialized poultry firms and traditional red meat firms, realignment of ownership continues as a major development in the industry. These developments, along with innovations in procurement, slaughter, processing and distribution, have caused the Agency to periodically review its priorities.

MEAT MARKETING

Investigations of commercial bribery and illegal brokerage in the marketing of meat continue to receive significant attention with emphasis on the operations of meat brokers and wholesale meat distributors. Firms making payoffs to meat buyers enjoy a favored position over other suppliers who compete on the basis of services and/or quality.

In addition to payoffs to meat buyers, investigations have also revealed kickbacks to packer salesmen. Cases of this nature necessitate numerous subpoenas for individual and business bank accounts and may cover broad geographic areas. P&SA works closely with other Government agencies such as the FBI, the IRS, and the Postal Inspection Service in these areas.

POULTRY MARKETING

The principal activity of the poultry program is to investigate grower complaints and to monitor the contractual relationship between integrators and contract growers for compliance with regulations administered by P&SA. This includes attention to timely and accurate weighing and proper accounting to growers. The Agency continues to encounter strong opposition from certain poultry processors and serious enforcement delays in carrying out its responsibility with respect to the time of weighing and discrimination in ranking growers for payment purposes.

The Agency is in what is hoped to be the final rounds of a case involving serious delays in weighing poultry (up to 18 to 19 hours) and discrimination with respect to ranking growers for payment purposes. This case was initiated early in 1983 and has required substantial Agency and Justice Department resources. This is a concrete example of gross inefficiency and frustration with respect to enforcing the poultry provisions of the Act.

FURTHER PROCESSING--RED MEAT AND POULTRY

The "name of the game" today in meat is further processing. This term includes fabrication beyond wholesale cuts in the case of red meat and of whole birds in the case of poultry, portion control (individual portions), the manufacture of specialty convenience and partially-to-fully cooked products, ready-to-serve products, and the like.

The poultry industry got the jump on red meats, but the movement is well underway now in beef, pork, and lamb. These developments have far-reaching implications from the production of live animals through to consumption. The Agency will keep abreast of the changes and modify its programs and priorities in accordance therewith.

Boxed Beef Production: The proportion of fed beef which is boxed has continued to increase. Also, slaughtering packers continue to increase their share of total boxed beef production. The industry is now boxing trimmed table cuts for distribution directly to retailers.

Boxed beef production increased to 20.6 million carcass equivalents in 1985, 77 percent of the 27 million steers and heifers slaughtered that year. The market share of the four largest firms, all of which are slaughtering packers, increased from 52 percent in 1979 to 62 percent in 1985.

GRADE AND WEIGHT

P&SA continues to monitor livestock procurement by packers on a carcass weight or carcass grade and weight basis. The Agency has completed its investigative study involving the Nation's major lamb slaughtering plants. Procurement and sales data were gathered from 14 plants operated by 13 different firms in the States of California, Colorado, Iowa, Michigan, Illinois, Minnesota, South Dakota, Texas and Washington.

The study showed that local live markets are generally competitive, given the limited volume of slaughter lambs marketed. The study did evidence certain procurement problems, such as settlement and final payment not being made on actual hot carcass weights, not maintaining individual carcass identity and failure to give full and true accounting to sellers. P&SA will work with the industry to correct the problems.

SCALES AND WEIGHING

The major emphasis of the Agency's scales and weighing program continues to be directed toward weighing investigations. Continued economic pressure on individuals and firms engaged in livestock marketing has contributed to falsifying weights as a means to improve income. This has prompted the Agency to increase the emphasis placed on scales and weighing. Accurate weights is very important in assuring full payment to producers. During fiscal year 1986, the Agency conducted 353 formal weighing investigations, with 46 (13%) of these disclosing false or inaccurate weights.

CLEAR TITLE

This is the first year for the Agency to report to the Subcommittee concerning its activities under Section 1324 of the Food Security Act of

1985. The section provides that buyers, commission merchants and selling agents shall take or handle farm products free of security interests unless notified of such security interest by either a state central filing system or directly from the lender or seller.

The responsibilities given the Secretary were delegated to the Administrator of P&SA in February of last year. These responsibilities are limited to developing and publishing regulations and to certifying central filing systems set up by the States. Final regulations were published on August 18, 1986.

As of February 1, 1987, ten States had applied for certification. The ten have been certified and no other applications have been received as of that date. The Agency has acted promptly in conducting its certification reviews. The time has varied from three weeks to three months, depending upon the manner in which the material was organized and the extent to which the proposed system met the requirements of the Federal statute.

FISCAL YEAR 1988 BUDGET REQUEST

The total budget request of the Packers and Stockyards Administration for fiscal year 1988 is $9,423,000. Included is $9,295,000 for the administration of the Packers and Stockyards Act and $128,000 for "clear title." The net increase consists of:

(1) $262,000 for administration of the Packers and Stockyards Act ($9,033,000 available in FY 1987), broken down as follows:

  (a) An increase of $61,000 to annualize pay costs and $308,000 to fund increased costs associated with the new Federal Employees Retirement System.

  (b) A decrease of $107,000 to reflect the FY 1986 post sequestered level of services under Gramm-Rudman-Hollings.

(2) $2,000 for implementation of Clear Title. ($126,000 available in FY 1987), broken down as follows:

  (a) An increase of $2,000 to annualize pay costs and $5,000 to fund increased costs associated with the Federal Employees Retirement System.

(b) A decrease of $5,000 to reflect the FY 1986 post sequestered level of services under Gramm-Rudman-Hollings.

The decreases requested will provide for program activities at the 1986 post sequestered level to meet deficit mandates.

Mr. Chairman, the Agency appreciates the opportunity to present this statement. We welcome the opportunity to respond to any questions you and other Members of the Subcommittee may wish to ask.

United States
Department of
Agriculture

Packers and
Stockyards
Administration

Packers and Stockyards Administration Fiscal Year 1988 Budget Review

Packers and Stockyards Administration:

Investigative and Law Enforcement Agency

Mission: The mission of P&SA is to assure the integrity of livestock, meat, and poultry markets and the market place

The programs of P&SA are designed: (1) to foster fair and open competition and guard against deceptive and fraudulent practices in the marketing of meat animals and the products therefrom under the Packers and Stockyards Act; (2) for certification of "central filing systems" established by States under Section 1324 of the Food Security Act of 1985.

Packers and Stockyards Administration

Overview

Size of industry

• Producer receipts livestock and poultry	$46 bil
(32% of total cash farm receipts)	
• Market value added through slaughter, processing and wholesaling	$12 bil
• Total value of red meats and poultry at wholesale	$58 bil

Coverage of program

• Scales	4,600
• Packers S&P (700 bonded)	6,600
• Other packers	6,000
• Poultry firms	250
• Posted stockyards	1,800
• Market agencies/dealers	7,000
• Packer buyers	2,800

Packers and Stockyards Administration

Areas of Responsibility

- Clear title
  - Issuing regulations
  - Certifying procedures
- Payment protection
  - Prompt payment
  - Packer trust
  - Custodial accounts
  - Bonds
  - Solvency
- Anti-trust activities
  - Competition
  - Conflicts of interest
- Unfair, deceptive, and fraudulent practices
  White-collar crime

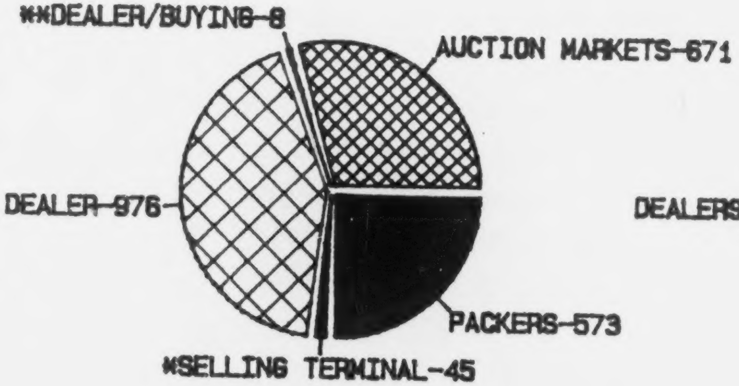
Packers and Stockyards Administration

FY 1988 Request - $9.4 Million

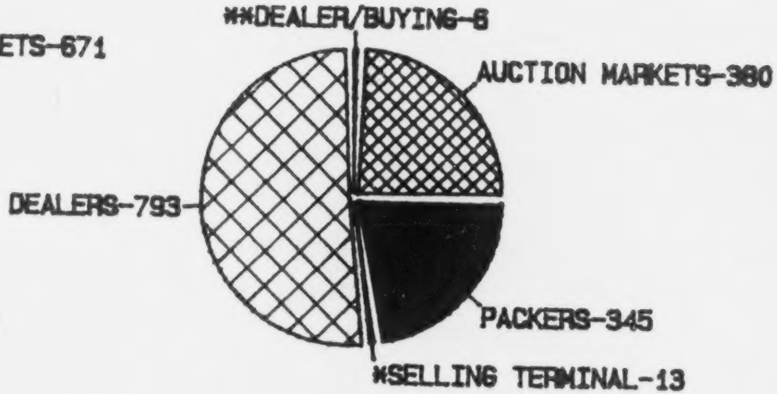
Agency Objectives:

- **Programs involving payment protection, bonding, packer trust, and custodial account surveillance maintained**
- **Major investigations involving white collar crime/fraud, unfair competition and deceptive practices continued**
- **Coordination with and assistance to other federal law enforcement agencies provided**
- **Programs to assure accurate scales and weighing maintained**
- **Enhancement of the Agency's information management system to improve productivity**
- **Certification of the "clear title" systems established and implemented under the Food Security Act of 1985 continued**

NUMBER INVESTIGATIONS COMPLETED AND VIOLATIONS DISCLOSED FY 1986



TOTAL INVESTIGATIONS COMPLETED
2273



TOTAL VIOLATIONS DISCLOSED
1537

*SELLING AGENCIES OPERATING AT TERMINAL STKYD
**DEALER/BUYING AGENCIES OPERATING AT TERM STKYD

OFFICE OF TRANSPORTATION

STATEMENT OF MARTIN FITZPATRICK, ADMINISTRATOR

ACCOMPANIED BY DR. WES KRIEBEL, DEPUTY ADMINISTRTATOR

INTRODUCTION OF ASSOCIATE

Dr. GILLES. Mr. Chairman, the fourth and concluding presentation will be made by Martin Fitzpatrick, the Administrator of the Office of Transportation.

Mr. FITZPATRICK. Thank you, Mr. Chairman, for the opportunity to come to you today. I would like to introduce my Deputy Administrator, Dr. Wes Kriebel, who is here with me today.

AGRICULTURE TRANSPORTATION PROBLEMS

Mr. Chairman, for the past 6 years, I have served as Administrator of the Office of Transportation. During that time, our office has provided significant contributions to American agriculture.

In business there is an old saying that "nothing happens until the sale is made." In agriculture, a sale cannot be made if the products cannot reach the marketplace. Getting products to the marketplace is often the problem for American farmers, particularly the small farmer and those isolated from the most heavily used transportation systems.

I believe that the people of OT, my colleagues and co-workers, the scientists, the economists, and traffic managers, have helped to solve many of the problems in agriculture. They have developed better shipping techniques, worked hard for those harmed by changing transportation laws and systems, and brought needed attention to the rural infrastructure crises.

For those reasons, it is certainly a most difficult and painful task I have in proposing to reduce OT funding in fiscal year 1988 in anticipation of eliminating the Office of Transportation by the end of fiscal year 1988. While it is indeed a difficult decision, we understand the budget realities facing our nation.

RECENT ACCOMPLISHMENTS

In fiscal year 1986, we continued our efforts to monitor the effects of rail deregulation on American agriculture. While deregulation has been positive in many ways, the issue of satisfactory guidelines covering the disclosure of contract information remains a concern, particularly the effect on small grain shippers.

We have monitored the economic impacts of the Staggers Rail Act on grain marketing, and we have prepared three technical assessments calling attention to unresolved regulatory issues.

Small shippers in isolated areas have been adversely affected as railroads abandon many lines. Working with a number of state and local government agencies, and rural community leaders, we have studied issues involving rural roads and bridges, rail abandonments, rural bus services, and others related to rural transportation planning and financing.

Last May, a well-attended conference was held in St. Louis. We also held agribusiness export conferences in Chicago, IL, and Carmel, CA.

In fiscal year 1986, OT continued its efforts to help develop export markets. We conducted port feasibility studies in several developing countries to improve shipping technology and to determine which foreign markets and how foreign ports could handle expanded U.S. exports. We also have developed a protocol to implement the Agreement on the International Carriage of Foodstuffs which will help facilitate the export of U.S. farm produce to the European markets.

We have actively worked with the livestock industry to overcome major problems in the transport of U.S. livestock to foreign markets. Given the major emphasis the administration and the industry place on expanding foreign markets, it is certain that these markets will not be profitable if we cannot transport our products in an efficient and safe manner.

Another important accomplishment of this office has been our participation in regulatory proceedings on behalf of American farmers. Although deregulation has reduced federal regulatory responsibility, we believe that the interests of the small shipper must be monitored. We have carried out that function and testified on behalf of the agricultural sector.

Mr. Chairman, recommending the elimination of an agency is never easy, and this is certainly no exception. The Office of Transportation and its people have served agriculture extremely well. I am hopeful that the base of work we have accomplished can be carried on by the States and industry.

Thank you very much.

Senator BURDICK. Thank you.

[The statement follows:]

STATEMENT OF MARTIN F. FITZPATRICK, JR.

Mr. Chairman, Members of the Committee, I appreciate this opportunity to meet with you again. With me are Dr. Wesley R. Kriebel, my Deputy Administrator, and William S. Wallace, Director of the Budget and Accounting Division of the Animal and Plant Health Inspection Service (APHIS). APHIS provides administrative support for the Office of Transportation.

Proposed Agency Elimination

We believe the Office of Transportation (OT) has provided significant contributions to American agriculture since its formation in December, 1978. However, in order to reduce the continuing Federal deficit, it has become necessary to make difficult choices. It has therefore been determined that OT functions are not as high a priority in serving the agricultural industry as other Departmental programs. Accordingly, it is proposed to eliminate OT by the end of Fiscal Year (FY) 1988. The funding and staffing ceilings provided in FY 1988 will allow the Agency to phase down its program responsibilities during FY 1988 and carry out high priority activities, such as those specifically directed by the Congress.

Recent Accomplishments

I would like to take a few minutes to report on some of our significant accomplishments during FY 1986. OT has been viewed by the agricultural community as a focal point for all USDA transportation matters. Since the establishment of OT in 1978, we have earned this respect by being responsive to the needs or our many and diverse clients. Each year, we answer telephone requests for assistance from carriers, receivers, State organizations, and many other clients. We continued to provide this service in FY 1986, assisting in things ranging from the movement of hay to help drought-stricken Southeastern farmers to the severe shortage of refrigerated cars hampering the shipment of potatoes from California. Our computer capability has enabled OT's trained and experienced agricultural transportation professionals to keep pace with the rapid changes occurring in intermodalism, deregulation, freight rates and the rural transportation infrastructure. They use this knowledge to help solve problems.

Recently, in addition to responding to specific requests from carriers, receivers, State organizations, and other clients, we have had success monitoring national and international events. We identify trouble spots before they get out of hand, working with industry, State, and local agriculture organizations and agencies. We study the many things affecting rural transportation availability and costs, individual problems, and changing regulatory requirements. The results of such studies become the basis for recommending policies and procedures to help rural America use the transportation system. For example, we have monitored the economic impacts of the Staggers Rail Act on grain marketing and prepared three assessment reports calling attention to unresolved regulatory issues. While deregulation has been positive in many ways, the issue of negotiating contracts in secrecy remains a concern, particularly the effect on small shippers. With industry cooperators, we have conducted research that improved mechanical and cryogenic refrigeration systems for rail and truck deliveries of fresh and frozen foods. We found a more cost effective means to unload ocean vessels of bulk and liquid agricultural commodities, with a 5-year payback and potential savings to USDA of several hundred thousand dollars in ocean freight charges.

Working with a number of State and local agencies and agribusinesses, we have studied issues involving rural roads and bridges, rail abandonments, and related rural transportation development matters. We have organized conferences to share transportation planning and finance, as well as timber bridge, information with numerous and diverse groups. Last May, a well attended and successful agricultural transportation conference was held in St. Louis. Upon request, we helped rural organizations resolve rail abandonments in South Dakota, North Carolina, and Mississippi localities.

These achievements illustrate some of our research and outreach programs. We have organized our talents to help farmers sell U.S. products and expand exports by easing the task of getting those products to markets.

Transportation Problems

Mr. Chairman, I would like to take this opportunity to alert you to some of the transportation problems facing agricultural and rural America. For the past few years, I have spoken frequently of the crisis in the rural transportation infrastructure. That situation still exists. We believe that we have done a good job identifying the problems and recommending solutions. It is now incumbent upon States and local governments to move forward, working with appropriate Federal agencies, to direct resources into the rural transportation infrastructure.

Rail line abandonments continue to threaten rural America. We have helped solve individual cases, but the overall trend must be addressed. Unlike abandonment of urban or metropolitan corridor passenger train lines, there is often no alternative for agricultural shippers when they lose their link to the market.

Another concern is the liability insurance crisis. Although nationwide in scope, it places yet another burden on rural small shippers and farmers. Also, as our nation strives to expand exports, ocean shipping rates and the ability of foreign ports to receive American products will continue to require attention. We cannot export anything if we cannot get our farmer's products first off the farm and then overseas.

Industry and State Involvement

Although the elimination of OT is being proposed, we believe that the problems I mentioned can be addressed. Many of the services we currently provide may be handled by the private sector and State governments. For example, we hope that universities will conduct research and analyses of transportation services and costs, rail abandonments, rural roads and bridges, and the consequences of transportation policy development upon agricultural producers. Industry should also continue with its research and expand its interest in common problems such as the rural road network. States and local governments need to ensure that rural areas receive their fair share of transportation funds.

Mr. Chairman, it is difficult for an Administrator to recommend elimination of the agency he is responsible for, but I understand that priorities are very difficult to establish as we try to get the budget under control. I believe that we have provided a service and developed a base of knowledge that can be used by others as they deal with the problems rural America faces. This concludes my prepared statement.

APHIS INTERNATIONAL INVOLVEMENT

Senator BURDICK. I want to thank the panel for its contribution, and now do a little cross-examining.

Mr. Hawkins, you are the first one. I notice in your budget, you request a decrease in certain programs which are carried on here in this country, such as grasshopper, boll weevil, animal damage control, fire ant and noxious weeds, while you request increases for certain programs that are carried out outside of the country, such as Mediterranean fruit fly, and foot and mouth disease.

Is it really more advantageous to the people to increase funding for those programs outside of the country, or should we really be concentrating our efforts here in this country with pests that affect us directly?

Mr. HAWKINS. Mr. Chairman, in administering the Animal and Plant Health Inspection Service, I look on our international activities as players on a ball team, if I can use an analogy. They are on the playing field, as are our "players" in domestic programs, to protect home plate. Our involvement in the international arena, in fact all of our work, is for one reason, and one reason only, and that is to protect our domestic industry.

As we evaluate where moneys are spent, of course, we look at competing priorities; changes due to different times, if you will, as to particular funding needs in some programs that we have started. It is in that evaluation sometimes that our budget will reflect an increase outside of the United States and a decrease inside, and it could, in the next budget, be vice versa.

That is some of the analogy that we use for prioritizing our budget programs.

Senator BURDICK. In this particular case, the increases are outside.

Mr. HAWKINS. Not in total, sir, but I appreciate the point that you are making.

Senator BURDICK. Do we get any contributions from those countries where we do this work?

Mr. HAWKINS. Yes, sir, we do. If I could take just a moment on our two larger programs. In the screwworm program, we have an 80/20 cost-sharing arrangement with Mexico that we are continuing to keep as we progress in that program. In the Medfly program it is not defined quite as definitely in those terms, but Mexico is putting in sizable contributions. From year to year, they are not quite as consistent, depending on their economy, but they are contributing substantially.

Senator BURDICK. Isn't there a point when we have to stop going so far away from our own borders? Isn't there a stopping point?

Mr. HAWKINS. Mr. Chairman, that is a difficult thing to explain sometimes, but in these programs, Medfly, screwworm, and foot-and-mouth disease, we must maintain a barrier some place to prevent introduction into the United States. We chose, at the direction from Congress some years back, to establish the Isthmus of Tehuantepec as the barrier for screwworm.

As we maintain that barrier at a cost of somewhere around $28 million, as we maintain the barrier for Medfly near the Guatemala/Mexican border, and as we maintain our barrier on foot-and-mouth disease in the Southern Hemisphere, whether it be Panama or Colombia, it makes a sizable package. But once the program could be established at a smaller barrier, it would save money.

The projection that some of my people have developed is that up to $200 million in a 10-year period could be saved if we ever arrived at a screwworm barrier in Panama. But those barriers must be maintained to protect the domestic industry from all three of those threats.

Senator BURDICK. But aren't we going a long way from home, to Colombia and South America?

Mr. HAWKINS. We started the program in Colombia many years ago, at the direction of Congress, sir, because of the planned expansion of the Pan-American Highway. Such an expansion would provide an easy means to spread FMD, so we proposed to establish a barrier between Colombia and Panama to prevent the virus from spreading. We are hopeful that in 4 years we will be able to pull back from the program because Colombia will be so involved, with their sizable ranchers, that they will want to continue the effort. Then we will be able to pull back from there.

ANIMAL DAMAGE CONTROL

Senator BURDICK. This is on another subject, and I will address this to anyone who wants to answer. The budget proposal for the animal damage control program was cut roughly in half. It would seem that such a cut would basically render the program useless.

Do you intend to continue with the blackbird pilot project that was started last year?

Mr. HAWKINS. Yes, sir; we certainly do. We hope that through the work we have done in several areas that we will have better tools in the foreseeable future. Although we did answer all of the requests for help in this area, some of the tools that we found when we took over the program were not the best. We are researching this area and we would hope to do better in the foreseeable future. We will continue the blackbird work, yes, sir.

Senator BURDICK. I am pleased to hear that in the year of 1987, you are going to continue the program.

Mr. HAWKINS. Yes, sir.

Senator BURDICK. As I understand it, looking at your budget, the program will be cut in half, I believe, from $20 million to $10 million next year.

Mr. HAWKINS. Yes, sir.

Senator BURDICK. Is that a wise thing to do?

Mr. HAWKINS. Sir, in many of our programs, as we look at Gramm-Rudman-Hollings and other budget considerations, we continually evaluate and assess the federal role in my agency, as to what is really a federal role and what is a role that can be picked up by the states and industry.

I believe because of the number of years that some parts of the animal damage control program have been in existence, and the techniques and training that a lot of people have had in the states and industry, that we could reduce the amount of our appropriation and play a role more in technical research and in supervision.

Senator BURDICK. I would think that as the program has had success with the level of funding that we are now using, it ought to be the better part of wisdom to keep using it until we have a substantive program.

Mr. HAWKINS. I agree that contention has a lot of wisdom to it, sir.

Senator BURDICK. I understand that you are beginning some field work on the toxicant CPT for blackbird protection. What is being done, and what is the progress?

Mr. HAWKINS. Sir, we hope, in the next month or two, to submit a request to EPA for an experimental use permit. Depending on the length of time it will take them to clear that for us, we could be using it in 1987.

Senator BURDICK. Is it beyond the experimental stage now?

Mr. HAWKINS. Until it is field tested, it would not be, and that is why we have applied for the permit.

If I might continue on your earlier question, sir, through the better management of administrative activities, my deputy, Mr. Lee, has done an admirable job in reducing costs.

We are attempting to minimize to the fullest extent possible the use of additional administrative personnel in the ADC program by using the existing administrative personnel in APHIS. We have cut out some duplication in that area, and it has made for substantial savings, which is one reason for the reduction.

Senator BURDICK. If you had ever seen blackbird infestation, you wouldn't want to cut very much.

Mr. HAWKINS. It is terrible, I know, sir.

Senator BURDICK. What is the top problem, as you see it today, to be dealt with by the animal damage control program?

Mr. HAWKINS. I was never asked that question before, sir, and it is a good question. There are two areas, the bird problem and the four-foot predator problem. If I said that the bird problem was more important than the other, the cattle industry would come down around my neck, and if I said it the other way, all of the farmers with birds would. I would hesitate to give a priority on the two, sir, they are both important.

Senator BURDICK. You are not the only one who has a neck to worry about. [Laughter.]

Mr. HAWKINS. I appreciate that, sir.

GRASSHOPPER CONTROL

Senator BURDICK. What can you tell me about grasshoppers? I understand that in 1988 there will be no funds for grasshopper control. Is that correct?

Mr. HAWKINS. That is right, sir.

When we were developing our 1988 budget, we reviewed the historical cycle of the grasshopper, and in our judgment, with the new funding mechanism that has been established by Congress for cooperation of the Department of Interior, we did not think it wise at that time to request funds other than funding for our survey activities and the integrated pest management research project.

Senator BURDICK. It seems to me, it is the better part of wisdom to continue this program for grasshoppers. It can be a very sad experience to have a farm and see that cloud come over. You have seen grasshoppers, haven't you?

Mr. HAWKINS. Yes, sir; I come from Oregon, and I have emptied grain tanks that had more grasshoppers than grain.

Senator BURDICK. Are they big ones there, too?

Mr. HAWKINS. I have a picture in my office, sir, that came from Texas, and they weren't that big. [Laughter.]

Senator BURDICK. Seriously, I have to be a little bit critical. I don't know why we should abandon that program.

Mr. HAWKINS. We don't intend to abandon it, sir.

Senator BURDICK. The control part, you do.

Mr. HAWKINS. No; with the funding mechanism that we have established with the Department of the Interior on federal lands, we would still continue that. Because of the cyclical nature, it was our best estimate when we developed the 1988 budget that we would not need a large appropriation. We could use some of our contingency fund for the smaller portion control activities around the croplands.

Senator BURDICK. Will there be money for state-controlled lands?

Mr. HAWKINS. To some degree, yes, sir.

Senator BURDICK. What about private lands?

Mr. HAWKINS. Private lands, yes, they would come under the same category as state lands when we look at it in 1988.

Senator BURDICK. As I understand it, there is no money for control, so what will the states get in 1988?

Mr. HAWKINS. The only thing that we would have available to us, sir, would be the small contingency fund that we have requested from year to year. It has been small, in the area of $2 to $3 million.

Senator BURDICK. If you are spending $10 million now, more than $10 million, it would seem to me that $2 million is a pittance.

Mr. HAWKINS. It well could be, sir, and for that we would take the responsibility. We treated fewer acres in 1986 than in 1985, and we would expect 1987 to be smaller than 1986, and 1988 to be smaller still. Evaluating that trend and the cyclical nature of the insect was the reason that we did not request funding. Also, the constraints of Gramm-Rudman-Hollings, and simply trying to hold down spending and not asking for more than we needed were factors. But, I can appreciate what you are saying.

Senator BURDICK. During the lifetime of Gramm-Rudman, do you expect the grasshopper population to be decreasing?

Mr. HAWKINS. I would hope that it would be decreasing.

Senator BURDICK. Do you expect that, really? I doubt it.

I yield to the Senator from Iowa.

IMPORTATION OF MEAT

Senator GRASSLEY. Thank you, Mr. Chairman.

I suppose if I start out asking you questions, Mr. Hawkins, you will think that this is a conspiracy to sort you out from all the others. But I think that I would like to start there, if I could, because I come from one of the leading meat producing states in the nation, and number one in pork, and all those statistics you are familiar with, I know.

One of the concerns we have is the importation of meat. From your standpoint, can you assure me that the meat that is imported into this country is of the same high standard that domestically produced and slaughtered meat is, not only for the benefit of the consumer that they have foreign produced meat of high quality and safety, but also from the standpoint of the unfair economic condition that there would be for my livestock producers if it was less than wholesome meat coming into our country?

I might say, for the benefit of Senator Chiles, I suppose the same question could legitimately be asked with regard to citrus or something like that coming into the country, whether it meets the same high standards. But I am mostly interested in your answer to the livestock question.

Mr. HAWKINS. Senator Grassley, I can speak to the area in which I have responsibility—the prevention of the entry of pests and diseases. I would defer to Dr. Gilles as far as quality.

Senator GRASSLEY. I will defer to both of you, then.

Mr. HAWKINS. My answer would be that imported meat is well regulated to lower the pest and disease risk, to the very best of our ability.

Dr. GILLES. Senator Grassley, relative to the inspection of the meat itself, the Food Safety and Inspection Service has this responsibility.

As you doubtless know, we do require that meat that is brought into this country would be handled in a system that would meet the minimum standards devised by the United States. There is a degree of reciprocity when meat inspection systems are used in various countries, and we do have inspectors overseas to assure that the meat coming into this country does meet minimum standards.

Senator GRASSLEY. This means the minimum standards that we would have for imported meat. How do those minimum standards compare to the quality of meat domestically produced and domestically slaughtered, is it equal?

Dr. GILLES. I am not sure that I am capable of answering that question. I really think that that question should be pursued with the technical people from the Food Safety and Inspection Service.

From our standpoint, in general, in policy, yes, we endeavor to make sure that there is quality.

Senator GRASSLEY. Are there prohibitions against meat coming into the country having feed additive residues in them, or any other chemical residues that would be prohibited in this country?

Dr. GILLES. The standards that we use are the same for imported as domestic. So if your concern is, and it is a very reasonable concern, are we permitting products to come into this country that would have a potential problem, the answer is, to the best of our ability, we endeavor to exclude that. We do maintain minimum standards.

Senator GRASSLEY. So at least we start out with the same regulations applicable to both, is that what you are saying?

Dr. GILLES. Yes, sir.

Senator GRASSLEY. As a practical matter, our ability to inspect, both overseas as well as when the meat enters the country, do we have the resources to see that those intents are carried out?

Dr. GILLES. Again, this is in the area of responsibility of the Food Safety and Inspection Service, and it will appear at a later date.

Again, let me say that within the resources that are made available, the answer to your question is, yes, we have a very high degree of concern about maintaining the safety and wholesomeness of meat and poultry products that are brought into this country. I think that the record will show that we certainly have maintained those standards for imported products as well as for the products that we produce domestically.

Senator GRASSLEY. On the question of inspection of meat, and the paying for that by the users, is that part of the President's budget?

Dr. GILLES. It is part of the President's budget, and it will require legislation before it can be effectuated.

Senator GRASSLEY. Do you have any personal concern over that as being the direction to go, or do you think that it is the direction to go?

Dr. Gilles. Philosophically, I think those who benefit from a service should be in a position to pay for that service, and I believe that this is the basic concern here.

If your question is, will there be any difference in control or difference in testing to be used if the fees were to come from user fees, rather than appropriated funds, I have no concern about that. I think that the professional leadership of the meat inspection is such that the financial resources would not affect the quality of this service.

Senator Grassley. You don't think that there is any conflict of interests, or any conflict of relationship between the government employee and the meatpacker if the meatpacker is paying for that service?

Dr. Gilles. No, I don't, and we have patterns which the Congress has already implemented that show that. For example, in the area of grain inspection, there is an agency that Congress saw fit, back in 1981, to make about 85 percent dependent upon user fees, and I don't believe that there has been any evidence in the past 6 years of any conflicts of that nature.

PACKER FEEDING

Senator Grassley. Could I turn to you, Mr. Jones, and I am not sure if I am up to date exactly on what the regulations are in regard to the amount of meat or the number of head of livestock a producer can control through feedlots before he slaughters of his own ownership.

Whatever those regulations are, is there any case where we are getting close to where, for competitive reasons the regulations need to be changed, or under existing regulations, the meatpacker is bumping up against those regulations?

Mr. Jones. Senator Grassley, there is no legal limit on the number of livestock that a packer can own that he slaughters. There is no limit on the time period that he can own livestock prior to their slaughter.

A Congressman from your state has introduced legislation with respect to packer feeding for a number of years. Field hearings have been held on that legislation, and other hearings, but to date the Congress has not seen fit to pass any legislation putting any limits whatsoever on the involvement of a meatpacker in feeding.

Let me add to that that this type of integration moves both ways. Of late there has been more inclination for feeders to become involved in packing operations than vice versa. This was not, of course, the situation a few years back, but there is no evidence today that the meatpackers are becoming aggressively active in pushing their way into the producer or feeding areas as far as cattle is concerned. But there are no limitations today. The Congress has not seen fit to impose any limitations.

Senator Grassley. Early in the history of the Packers and Stockyards Act, were there any such regulations?

Mr. Jones. No, sir; there were no regulations.

Senator Grassley. In the 1920's?

Mr. Jones. There have never been any regulations, never any provision in the law which precluded or limited a packer in the feeding operation.

Senator GRASSLEY. Would you supply, for the record, and for me and the committee, any statistics you have on the percentage of the 10 largest packing companies on the slaughter of their own livestock that they own?

Mr. JONES. Yes, sir; we put out annual statistics that do give an indication as to this trend. Those statistics do not include all of the livestock that would be fed by subsidiaries or by officials of the packing companies, but the other statistics are available. The most recent issue hasn't been out very long and we will be glad to send that to you.

[CLERK'S NOTE: The information is available in the subcommittee files.]

MEATPACKER CONCENTRATION

Senator GRASSLEY. Is there any concern on your part as to whether or not there may be a problem growing in that area for competitive reasons packers are slaughtering livestock that they have had an interest in feeding?

Mr. JONES. The trend in that would not give you a cause for alarm. The concentration in the industry would be more, in my humble opinion, a cause for alarm than the ownership of the livestock by the packers who slaughter. It is somewhat different in the lamb industry than it is in the cattle industry, or even in the hogs. But the statistics and the trends simply do not bear out a case for alarm with respect to the ownership of the livestock that they slaughter.

Senator GRASSLEY. On the point that you just raised, an immediate concern would be the decline in the number of meatpackers in states in the upper Midwest, particularly in my state, it seems like almost monthly some packing company is closing its doors.

You mention in terms of concentration, and I assume that maybe one is leading to another, has it reached a point where there is any indications of antitrust problems at this point in that area?

Mr. JONES. We did conduct a study of fat cattle markets just a few years ago now, and we studied that on the basis of concentrated areas of feeding, including the Southwest, the panhandle area, Kansas, on up into what we call the Nebraska/Iowa area, and that study showed that the markets were competitive.

Buyers do cross over those lines, and cattle do cross over or are trucked over those lines. That study, I believe, was published in 1982, and at that particular period, it showed that the market was still acting competitively.

As we supervise the industry today, that is still what comes through to us. As I mentioned, even in the lamb industry, with the limited volume, the markets are acting competitively.

Senator GRASSLEY. Was that competition just within meat packing, or was that study in relationship to meat packing and the retailing of meat?

Mr. JONES. No; this was with respect to the live animals and the procurement of live animals. The volume now with respect to retailers is very minimal.

Senator GRASSLEY. Do you suggest that in the last 4 or 5 years there would be any reason to think that the situation has deteriorated which would modify the 1982 conclusions that were drawn?

Mr. JONES. Any time you see competitors leaving the arena, of course, it is not good, but the market, according to our work is still active in a competitive nature.

There continues to be, Senator, transfers of ownership not only in the red meat area, but between the red meat and the poultry industries as well. So there is still a very active transfer of ownership, and I would not say that in my own mind, or in our assessment of the situation, that it has eroded in the last 4 or 5 years. The amount for the largest firms slaughtering fed steers and heifers, for example, that percentage has increased, but it is still a competitive situation.

MEAT AND POULTRY MARKETING

Senator GRASSLEY. I have asked my last question, but in conclusion, I notice that in your testimony you did give, on two or three points, emphasis to this combining of poultry and red meat slaughter marketing. I assume that that is somewhat of a warning for us to be watching that? Is that your heavy emphasis upon that?

Mr. JONES. We are certainly watching it because now several traditional meat firms are becoming very active in the poultry industry, and vice versa. When you get to the product manufacturing stage, and the distribution stage, you now are having the raw materials from both of those sources being mixed in manufactured products.

Those firms are now competing actually in the same competitive arena, in addition to the products and their traditional competition at the buyer's level. I think the Congress needs to realize that one set of these players is subjected to a different set of rules than is true with the traditional red meat packers, and that is the reason for the statement being in our testimony.

As far as red meat is concerned, as you well know, having worked with us in the 1976 amendments, there is a requirement for prompt payment, and there is a packer trust provision in case packers do fail financially, the cash sellers stand first in line to be paid. There are no such requirements with respect to the white meat industry.

Senator GRASSLEY. Thank you, Mr. Chairman.

Senator BURDICK. Senator Chiles.

CITRUS CANKER

Senator CHILES. Mr. Hawkins, the eradication of citrus canker is a top-priority issue of citrus growers. In fact, it is so important to them that they decided to help pay for the eradication program when the U.S. Department of Agriculture pulled out of the canker project last year. So far the program costs have been fairly consistent.

However, with the discovery of "A" strain last summer, growers are anxious about what will be found this summer, and the following years, and that the funding might not be adequate to deal with a new outbreak. You know how fast canker could break out and what a terrible, terrible scourge it could be, if it did.

In light of this, why is the USDA proposing to cut the emergency contingency fund by more than 50 percent?

Mr. HAWKINS. I am having a little trouble, Senator, on the last part of your question, cutting the contingency fund by 50 percent.

Senator CHILES. We have about $5 million in the contingency fund now, and we haven't had to draw on that money, and we hope that we won't have to. We would like very much not to have to, or have to draw very little of it. In case we did have to, the whole thing is that you would be able to move in a timely fashion. Now you are proposing to cut that.

Mr. HAWKINS. Yes; we appreciated Congress's decision to add money in the contingency fund for citrus canker eradication. At the time that we developed the 1988 budget, we did not believe that citrus canker would create a problem that we couldn't handle within the resources requested.

Senator CHILES. In discussing those emergency contingency funds, as you know, when we were trying to get the canker money before, we ended up having to try to get some Commodity Credit money, Commodity Credit had to terminate something, reprogram some money there, we had a tremendous problem with that, and those people felt that they got hit when that particular thing happened.

Why doesn't the USDA have a rainy-day fund to deal with emergency pest outbreaks, then when your contingency funds are exhausted, rather than relying on the hope that the Commodity Credit has money, and that the Office of Management and Budget will allow us to release that money, we would have these funds.

Congress always wants to do that. Eventually, we try to find some way to do it, but we have to go to all these lengths to try to do that. Wouldn't it make more sense to have a fund like that?

Mr. HAWKINS. Yes, sir; we share your concern. We do request a small contingency reserve each year, and we have done that again in fiscal year 1988.

Senator CHILES. You are even proposing cutting that, too, aren't you, the overall contingency?

Mr. HAWKINS. Yes; it is down from what we have in 1987, that is right, sir. The problem is that it is difficult to predict what all of our emergencies will be.

Senator CHILES. But you know that in a lot of years some pest has broken out, and you have had to have more money, it hasn't always been Florida. It has occurred several times, but it has not always been Florida, other states have problems, too.

Mr. HAWKINS. That is an understandable viewpoint, and it may be the right one. Sometimes it is difficult for us to have a sum of money set aside for something that is not used or needed. It is picked away, and funds consistently are requested out of that if it is not for a viable purpose. That is the reason that we have not requested it.

Senator CHILES. We found four Medflies in Florida today, in Hialeah, you know what that is going to mean. We have had that hit before. It just seems like it is consistent enough. I don't think that you are talking about a fund that is just going to sit there and never get used, because I think that it is consistent enough. We are going to have these pests, I think. It seems to me that we ought to have such a request like this.

BLACK PARLATORIA SCALE

Over a year ago, the black parlatoria scale was found in backyard citrus trees in Dade County. It is my understanding that this is the only place in the United States that this scale has been discovered. Hopefully, we have a good chance to eradicate this pest. It seems to me that we certainly ought to be making an effort to do so.

I understand that Commissioner Conner, of our Florida Commission on Agriculture, asked USDA to participate as a partner in an eradication project. What is the status of this particular request?

Mr. HAWKINS. A technical group of both Florida and USDA experts has been visiting and I have been in touch with the commissioner in this regard. It is our intent to work cooperatively with the state of Florida.

Senator CHILES. We are not going to visit on it so long that this scale gets out of the backyard and into the groves, are we?

Mr. HAWKINS. I appreciate that the timing is important, sir, and we intend to act appropriately.

CAPMED

Senator CHILES. Thank you, sir.

What is the status of the CAPMED program now?

Mr. HAWKINS. The CAPMED program is still in a planning stage. We were working with the Food and Agriculture Organization to put together a donors conference to try and establish the different sources of funding that could be obtained.

The donors conference was proposed too early, without enough thought given to it, and we are, at the present time, meeting with the Food and Agriculture Organization to draft a plan of work.

Senator CHILES. What do you see happening from that?

Mr. HAWKINS. I visited with an entomologist involved in CAPMED recently when he was in town. His comment was that it looked favorable for a substantial amount of support. That is a little hard to tie down in terms of dollars. I would hesitate to predict what will happen in a definite timeframe, Senator.

Senator CHILES. I hope that something can go forward with this, because it is certainly a tremendous area that we need cooperative effort in.

Mr. HAWKINS. Yes, sir; we, naturally, would be looked upon as a substantial participant, but we have not been in a position to actively develop program plans. We are waiting for some direction on that, sir.

Senator CHILES. I thank you.

Thank you, Mr. Chairman.

OT SENATE STUDY

Senator BURDICK. I have a question for Mr. Fitzpatrick.

In the fiscal year 1987 appropriations report, adopted by the Senate, the Office of Transportation was instructed to conduct a study of the gasoline tax contributions of rural areas and their correlation to federal funds available for construction and maintenance of roads and bridges in rural communities. The deadline for this annual report is June 1, 1987. On December 3, 1986, I wrote to Secretary Lyng to inquire about the status of this report, but I have not yet received a reply to my letter.

At this time, would you provide the subcommittee with a summary of the progress to date on this report and any of your preliminary findings?

Mr. FITZPATRICK. Mr. Chairman, we have proceeded with the study. We have contacted the Department of Transportation and the Federal Highway Administration to gather the data for meeting the June 1 deadline. We have also contacted universities in the Midwest and throughout the country to help us and assist us with this study. The Secretary of Transportation has put her full support behind the investigation and the study.

Senator BURDICK. But the report is not ready.

Mr. FITZPATRICK. It is not ready at this time, Mr. Chairman. It is an extensive report.

Senator BURDICK. It is due by June. Do you expect to meet that deadline?

Mr. FITZPATRICK. We are working hard at the deadline. We will provide you at least with the several states impacted, if not the entire study. We are working very hard at that. It is a large project for a short time, and we are making every effort to meet the deadline.

Senator BURDICK. Does that mean that you will meet the deadline?

Mr. FITZPATRICK. Yes, sir; we will meet the deadline.

CLEAR TITLE

Senator BURDICK. Mr. Jones, to date, what 10 states have certified central filing systems required by the Food Security Act to notify purchasers of farm products of liens on such products?

Mr. JONES. The 10 states are Montana, Mississippi—I have a list of them in the testimony.

Senator BURDICK. You can supply them for the record, if you don't have them.

Mr. JONES. We have it right here. The 10 states are Montana, Mississippi, Idaho, Utah, Oregon, Maine, North Dakota, Nebraska, Arkansas, and Louisiana.

Senator BURDICK. Have there been any problems in implementing this provision of the Food Security Act?

Mr. JONES. There have been no particular problems as far as the agency is concerned. I think that there are some problems in the country, problems in getting it implemented, yes. But it is like any other new program, we do receive lots of phone calls with questions, and we would expect that.

Senator BURDICK. Do you know of any other states that are interested in setting up such a system?

Mr. JONES. Yes; we have been contacted by several other states at various times, and we will probably be receiving additional applications.

COOPERATIVE EXPORT ACTIVITIES

Senator BURDICK. Mr. Torgerson, cooperatives are commonly viewed as advantageous to farm income. Through direct marketing, cooperatives are able to gain in our domestic marketplace. I notice that among the research accomplishments of the Agricultural Cooperative Service in 1986 was a study of the use of export management companies by cooperatives.

Could you please tell the subcommittee how many of the 5,600 existing cooperatives are exporting directly; how many are exporting through intermediary organizations such as management companies or export trading companies; and does the Agricultural Cooperative Service intend to provide technical assistance to cooperatives that may wish to market directly with foreign countries?

Mr. TORGERSON. Mr. Chairman, we have recently completed a study based on 1985 data of cooperatives' exporting activities. We find that there are just under 100 cooperatives that are actively involved in exporting about 3.3 billion dollars' worth of products at the present time.

These organizations represent quite a variety of products. We are dealing right now in a rather difficult exporting environment. Nevertheless, there are opportunities that come about on a continuous basis, and we are working very diligently with cooperatives to enhance their export position.

For example, I had a farm operator from the state of Washington in my office today interested in seeking the potential of exporting garbanzo beans. This is a form of specialty crop that we certainly want to look into and assist producers if we can.

Senator BURDICK. Are these exporters that you referred to, the 100 cooperatives, exporting directly or through intermediaries?

Mr. TORGERSON. Most of them are directly exporting at the present time. As you know, particularly in the coarse grains, the cooperatives have often been fobbers, they have brought it to port or to their own place of elevation for export, and then turned it over to one of the multinational firms for exporting purposes. But others that we are reporting on are mostly involved in direct exporting of specialty crops or value added products.

Senator BURDICK. Senator Grassley, do you have a few more questions?

MEAT INSPECTION

Senator GRASSLEY. Yes, I do. I have some on transportation, but before I get to that, I would like to go back to you, Mr. Secretary, because even though the meat inspection service is not before us now, when they are in the next 2 or 3 weeks, I may not be able to be here, so I want to follow up on something.

Number one, and this does not involve the Agriculture Department, this involves the State Department. Sometimes Congress feels the necessity of trying to legislate in this area of imported meats in regard to seeing that very concretely in the statute that we are not allowing some meat in with some residues that maybe are prohibited under national law.

You say that this is not a problem, and I am not going to dispute you, because you are saying that from that standpoint both foreign meat coming in and domestic meat meet the same standard. But I sense that there has got to be a problem there when we, at the very same table, can have people from the State Department saying that we shouldn't legislate in that area.

When we are trying to make what we consider agricultural policy, it is very frustrating to me to have somebody from the State Department say, that is bad for our international relations to legislate that, because we want free trade, and we want everything to come in here and we want to be able to export, and we don't want retaliation from foreign countries.

Are you sure that there is not some sort of a problem there, if we have another department of the federal government trying to say that Congress shouldn't be more concrete in its approach to this?

Dr. GILLES. That is an excellent question, Senator Grassley. Can you ever be sure of anything? I guess that this is my question, and I don't mean this facetiously.

I think that the people within the area of the Food Safety and Inspection Service do an excellent job of endeavoring to make sure that the meat products that are consumed within the United States are wholesome. I think that this is the major thrust of that particular area. I say wholesome without regard to source, whether it is a foreign supplier or a domestic supplier.

Certainly there have been instances when meat has been landed in the United States that didn't meet the inspection's basic requirements, and that meat is generally confiscated and it may be returned.

I think that there is, certainly, a great concern that you are articulating both from the standpoint of the producers and from the standpoint of the consumers. I believe that FSIS is one of those agencies that feels very strongly that they are a neutral third party assuring that the buyers and the sellers are meeting the legislative requirements that have been laid down.

Can there be legislation created to improve our position, I presume that the word is yes. Do we have sufficient legislation at hand now to do this job, I think that the answer to that question also is yes.

Senator GRASSLEY. Would you say that what you have just told me, even though my question was in regard to meat, could be applied to any imported food that I would ask you about?

Dr. GILLES. Within the area of my responsibility, obviously, we are talking specifically about meat and poultry products as far as USDA is concerned, because the Food and Drug Administration has the other responsibilities.

CITRUS INSPECTION

Senator GRASSLEY. What about citrus fruit; specifically, can citrus fruit come into the country with some chemical residues on it, a spray that is used, that we don't allow in the United States?

Dr. GILLES. Generally the citrus that comes into the United States would fall into the quarantine area. Mr. Hawkins has responsibility for that. Much of the citrus, of course, is brought in such a way that the skin must be removed so that the likelihood of any residues that had been applied to the surface would be transmitted into the food supply is very minimal.

Mr. Hawkins, would you care to amplify on that?

Mr. HAWKINS. The only other thing that I would add is that residues on those products would come under the Food and Drug Administration, Senator.

IMPORTED MEAT

Senator GRASSLEY. So it involves another department, and I am going to have to get to it.

One other thing is the import of meat. In December 1985, my meatpackers in my state were complaining about some European country, I forget the specific country, or whether it was for the EC, was coming to the packing plants in my state, indicating that they were going to upgrade requirements on American meat exported to these European countries.

Whether or not those increased requirements ever came through, I don't know. Maybe they didn't because I haven't heard much more from my local packers on that. But they indicated that these were requirements above and beyond what our American Government requires for domestic meat sold in this country.

Do some foreign countries have higher requirements for meat that we export to those countries, that would be higher than we would have for our own consumers? Would the requirements for meat going, let's say, to some European country be higher than we would require of those meats coming to this country of European origin?

Dr. GILLES. Senator Grassley, you have articulated a very sensitive issue at the present time. You are informed correctly. There were members representing the EC that visited a number of the meat packing companies here in the United States.

The issue has not yet been resolved, but the regulations and requirements that were being suggested by the EEC, we believe to be unrealistically exclusive to the point where it may not be a matter of technology that is involved, but rather a matter of a trade barrier that is involved.

The issue is a very politically sensitive one in the international theatre, and some of the requirements that were suggested by these veterinarians that were visiting our plants were challenged and are continuing to be challenged because it is our information that some of the requirements that they were endeavoring to impose upon the United States system were not being met in the EEC.

If we are going to foster international trade, we believe that we should have a level playing field. So this matter is still under discussion.

Senator GRASSLEY. Is it under discussion between personnel of our USDA and the European Community, or is it at some other level that the discussion is going on?

Dr. GILLES. It is both at the technical level and with the U.S. Trade Representative.

Senator GRASSLEY. Is the State Department in any way involved?

Dr. GILLES. Yes; I believe that they will be.

Senator GRASSLEY. The U.S. Trade Representative is an independent office. I want to know if the U.S Department of State is involved in these negotiations?

Dr. GILLES. At this point, I think that basically the discussions have been primarily directed toward the technical and scientific approach, rather than the state approach. However, that is a question that should probably be addressed in depth with the FSIS people.

Senator GRASSLEY. Is this close to being decided and resolved?

Dr. GILLES. We have gone beyond some expiration dates, and we have had extension of discussions. One date was the first of this year, and this has been extended to April. It looks like the game has been played, and probably will be played again. The matter has not been resolved, and it is still under discussion.

OT ELIMINATION

Senator GRASSLEY. On transportation, Mr. Fitzpatrick, I have a statement that they are proposing to eliminate the Office of Transportation.

Mr. FITZPATRICK. That is correct, sir.

Senator GRASSLEY. That is supposedly a budgetary item to save money, or is it some other reason?

Mr. FITZPATRICK. It is an effort to save money. We have to make cuts somewhere.

Senator GRASSLEY. Hopefully, we won't have a year like we had last year, but assuming that somewhere down the road we are, and the farmers are going to have trouble shipping their grain. Particularly in the fall of the year, this is a major problem.

Farmers turn to people in the USDA, your office, for some help in regard to that. Where will the farmers of my state turn in USDA for the sort of assistance that we got last year?

Mr. FITZPATRICK. If the Office of Transportation is not there, I do not know where they will turn, but I am sure that someone at USDA will resolve that question. At this time, I can't answer you.

Senator GRASSLEY. Let me ask the Assistant Secretary. If the Department has done away with the Office of Transportation, are you anticipating having anybody else under your jurisdiction taking care of this problem, or hasn't it been thought about yet?

Dr. GILLES. It has been thought about, Senator. The issue has not been resolved, but certainly some of the functions of the office that Mr. Fitzpatrick represents should be considered both unique and essential to agriculture.

I think that before the Office of Transportation was established, these functions were carried on within the Department. The matter has not been resolved, but it is under active consideration.

Senator GRASSLEY. I suppose that it would be an act of disloyalty if I asked you if we can do away with the Office of Transportation, and you said yes.

Dr. GILLES. Are you asking me the question?

Senator GRASSLEY. Yes; I am asking you the question, if you have an answer to it. If you can't answer it, I don't expect you to commit political suicide.

Dr. GILLES. Obviously, the question has been raised before. Within any organization, I think that you need time to pause and see what functions are essential, and where can those functions be conducted. The issue has been under discussion, but it has not been resolved.

Can we get away without an Office of Transportation? The answer to that question is yes. The other question is ought we? That is the question that has not really been faced, or been completely resolved.

Senator GRASSLEY. Answer it, please.

Dr. GILLES. The President proposes and Congress disposes on this particular issue.

Senator GRASSLEY. We won't hold this stand against you.

UPPER MISSISSIPPI BASIN STUDY

Again back to Mr. Fitzpatrick, ours was one of several states cooperating with the upper Mississippi Basin inland waterways study. What is the role of the Office of Transportation in that project?

Mr. FITZPATRICK. The USDA contributed $100,000 in a cooperative project with the states. We want to make sure that the interests of the grain shippers and producers are looked after in the allocation of costs and in the allocation of expenses, to the waterway system.

We have all accepted the user fee policy set forth by Congress and the administration, and now it is a matter of making it work for farmers. We are doing that with state assistance.

INCREASE IN SHORTLINE RAILROADS

Senator GRASSLEY. In regard to train rail transportation, we have had a fairly dramatic increase in the number of shortline and regional railroads serving agricultural areas, and I would like to have some judgment from you as to whether or not you believe that these carriers will adequately serve the needs of grain shippers in the agricultural areas in the future?

Mr. FITZPATRICK. Senator, I believe they can. I believe that it can be a very important step. In the past year, we have helped several shortline railroads get off the ground, and helped them deal with the problems of agriculture. As an example, we helped a local railroad around Cedar Rapids obtain loading orders through USDA, and assisted them in shipping some grain out of the state.

Senator GRASSLEY. The administration wants to sunset the office, and they also want to sunset the Interstate Commerce Commission. Let's say, if both were gone, then is there any way you see that the farmer is going to be protected in the future in regard to captive shipping and any other problems without the help that you give plus any regulation that comes from the ICC, or that ought to come from the ICC?

Mr. FITZPATRICK. I believe the states can help in this regard, in representing the farmers. I believe, as Dr. Gilles pointed out earlier, the functions of our office will be considered essential and be somewhere in the Department of Agriculture so that they can provide this service.

MEAT INSPECTION

Senator GRASSLEY. My last question.

Back to my original point with you, Mr. Secretary, and since this is an Appropriations Committee meeting, are there resources of the USDA going into these negotiations with the EC on these nontariff barriers of meat inspection, or is that entirely with the Special Trade Representative?

Dr. GILLES. Certainly there are resources of the USDA going into this. We have had participants.

Senator GRASSLEY. At the negotiating table.

Dr. GILLES. We have had participants at the negotiating table. Dr. Houston has been there, and some of his people have been there. We do maintain a representative of FSIS in Brussels.

Senator GRASSLEY. I would make a personal request that within the next couple of weeks you would have somebody who is up to date on this from the USDA, not the Special Trade Representative, come to my office and brief me on it.

Dr. GILLES. We will be pleased to do so. This is a very important subject, and we have been endeavoring to follow through and provide the best technical information that we can from the standpoint of the USDA.

Senator GRASSLEY. Thank you very much.

SUBMITTED QUESTIONS

Senator BURDICK. I have additional questions to be submitted for the record, you can respond to them in an expeditious manner. They are from Senators Burdick, Sasser, Bumpers, Cochran, Domenici, Hatfield, McClure, and DeConcini.

[The following questions were not asked at the hearing but were submitted for response for the record:]

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

QUESTIONS SUBMITTED BY SENATOR BURDICK

INTERNATIONAL PROGRAMS

Mr. Hawkins, I notice in your budget, you request decreases in certain programs which are carried on here in this country such as grasshopper, boll weevil, animal damage control, fire ant, and noxious weeds, while you request increases for certain programs that are carried out outside of the country such as Mediterranean fruit fly and foot-and-mouth disease.

You stated in your testimony, for example, when you are referring to the screwworm program, that each mile of progress beyond the currently protected area means more protection for the United States. At some point, surely that border gets so far away that there really isn't any noticeable benefit to the United States.

Question: Have you done cost-benefit analyses for these various programs being conducted outside of the country?

Answer: Cost benefit analyses have been conducted by APHIS, or with APHIS funds through a cooperative agreement, for the Mediterranean fruit fly, screwworm, and foot-and-mouth disease programs. Both the Medfly and screwworm analyses address the benefits and costs to be derived from establishing and maintaining a "barrier" at the Panama-Colombia border. The foot-and-mouth disease analysis focuses on the benefits and costs associated with eradicating this disease should it become established in this country.

Question: If so, could you please provide summaries of them to the committee?

Answer: We will be happy to provide summaries of these analyses for the record.

[The information follows:]

A STUDY OF THE POTENTIAL ECONOMIC IMPACT OF FOOT-AND-MOUTH DISEASE IN THE UNITED STATES

The possibility of the introduction of foot-and-mouth disease (FMD) into the United States is of great concern to all persons involved in our livestock industry, and indeed the whole Nation. For many years, we have enjoyed freedom from this disease which is common in most parts of the world. The impact of FMD introduction would be staggering. It would be of particular concern to those officials in the Animal and Plant Health Inspection Service (APHIS) of the U.S. Department of Agriculture (USDA) who would be faced with having to make immediate decisions about strategies which they might employ to eradicate the disease or to reduce its impact. Because of the complexities of the interaction of FMD with its animal hosts and the economic and physical environment in which they live, the dimensions of the consequences of control strategy decisions are difficult to assess. This is true even under conditions of the analysis done in this study, but most certainly under conditions of a need for immediate decisions.

With these concerns in mind, the Administrator of APHIS and others initiated a study aimed at defining and estimating the potential economic impact of FMD and of technologically conceivable control strategies under the conditions of the hypothesized introduction of the disease into the United States. Under a cooperative agreement with APHIS, the College of Veterinary Medicine and the Department of Agricultural and Applied Economics at the University of Minnesota collaborated on a study to estimate the technical and economic dimensions of the disease and of selected control strategies, and to provide guidelines which would be useful to decisionmakers in their strategy and budget planning. This general report describes the major assumptions, analytic methods, findings, and conclusions of this study.

This study was conducted with the following major objectives:

1. To estimate the economic impact for the United States should FMD become endemic,
2. To estimate the relative costs and benefits of alternative control strategies against FMD in the United States, and
3. To provide guidelines for indemnification to livestock producers under animal disease control programs.

This study required the contribution of veterinarians, economists, animal scientists, and statisticians. Many individuals in academia and government service were involved either as contributors or to provide consultation and background. The data were gathered from a wide variety of literature and personal interviews. Early during the study, it became apparent that in order to proceed with the establishment of the necessary assumptions, several basic questions had to be investigated before we could provide information for use not only in this study but in future studies in animal health economics as well. The results of these investigations are described in a series of 12 technical reports, which are included in their entirety in this volume. Technical Report 12 deals principally with objective 3 above, the provision of indemnification guidelines. This topic is not treated elsewhere in this general report.

FOOT-AND-MOUTH DISEASE

This disease is the most contagious viral infection affecting cattle, swine, sheep, goats, and other cloven-footed domestic and wild animals. It is characterized by vesicular eruptions (blisters), followed by erosions of the epithelium of the mouth, muzzle, feet, teats, and udder. Particularly in susceptible cattle, there may be permanent damage to heart muscle and feet. In most outbreaks the morbidity is high and the mortality is low except in young animals that become malnourished from inadequate nursing due to oral lesions combined with the teat lesions of their mothers. The most important method of FMD transmission is by infected animals in aerosol contact with susceptible animals. The most likely method of introducing FMD into the United States is from contaminated animal products, frozen semen, or animal feed imported from areas of the world which have the disease.

The clinical diagnosis of FMD is easily confused with other diseases, especially vesicular stomatitis, vesicular exanthema, and swine vesicular disease which cause similar signs. In the United States, any farm with animals showing vesicular lesions is strictly quarantined until the field diagnosis can be verified by laboratory examination either at the National Veterinary Services Diagnostic Laboratory in Ames, Iowa, or at the Plum Island Animal Disease Center. This diagnostic capability and the quarantine policy which we have in the United States is the most important defense against the potentially catastrophic spread of the disease.

Successful immunization against FMD is possible but relatively difficult. There are vaccines, but the nature of the virus poses two serious technical problems: (1) the duration of vaccine immunity is short (6 to 12 months), and (2) a vaccine against one virus type does not protect against another virus type. (At least 7 immunologically distinct types of the FMD virus have been identified and each type has 3 to 29 different subtypes. The immunity against one subtype is only partial or nonexistent against another subtype.) As a practical matter in endemic areas, animals are vaccinated with a polyvalent vaccine frequently or, in some areas, only in anticipation of an increased threat of the disease. Another procedure that is successfully practiced in endemic areas is to deliberately expose animals to FMD at times when the risk of production loss is lowest—for example, when they have access to ample feed in contrast to when they are being moved or during a dry season.

FMD IN THE UNITED STATES

FMD has been introduced into the United States on eight occasions since the first reported introduction in 1870. The disease has not become endemic following such introductions because of the successful employment of strict slaughter and quarantine disease control procedures. The most recent introduction of FMD into the United States was a mild outbreak in California in 1929. Prior to that, in 1924,

another outbreak of FMD in California resulted in **the destruction** of 109,000 cattle, sheep, and swine in the successful eradication program. Also during that epidemic, some 22,000 deer in the Stanislaus National Forest were destroyed because infection was detected in deer that had been in contact with cattle.

The most devastating U.S. epidemic occurred in 1914. This epidemic started in Michigan and by 1915 had spread to 22 States after it gained entry to the Chicago stockyards. During that eradication program, some 172,000 cattle, sheep, goats, and swine were slaughtered.

FMD IN OTHER COUNTRIES

A large part of the world lives with FMD as an endemic disease under conditions varying from only sporadic vaccination or controlled infection management to the strict control of animal and animal product movement and the compulsory vaccination of all or most susceptible animals. Control programs in countries with endemic FMD vary greatly in both intensity of application and effectiveness. In general, the most effective control programs are found in Europe.

Several countries besides the United States are considered to be "free" of FMD. A country is "free" of the disease, according to the standards of APHIS, if it has not had outbreaks for several years, if ever, and does not vaccinate against FMD. An additional requirement is that the country have a policy of employing strict eradication measures to "stamp out" any outbreak. Furthermore, it must have requested recognition as an "FMD-free" country, maintain diagnostic services capable of diagnosing FMD, and carry out ongoing measures to adequately investigate outbreaks of diseases which are suspicious of being FMD, i.e., vesicular diseases. Australia, New Zealand, Japan, Ireland, and England are in this group. In the Western Hemisphere, all countries north of Colombia are "free" of FMD.

An important contemporary issue threatening the "FMD-free" position of North America is the planned highway construction through the Darien Gap which separates the Pan American Highway between Colombia and Panama. During the period 1946 to 1954, Mexico experienced an FMD outbreak which was controlled by a combination of strict slaughter and area vaccination programs. A 1952 outbreak in Canada was stopped by prompt regulatory action aided by the severe winter weather which hindered normal animal movement that year. Since 1954, there have been no known incidents of FMD infection in North America. APHIS' efforts in maintaining import restrictions on animals and animal products into the United States and the Agency's coordination of programs in Mexico and the Central American countries are undoubtedly major reasons for this record.

ALTERNATIVE CONTROL STRATEGIES FOR THE UNITED STATES

Even with our current import restrictions, it is far from fanciful to hypothesize the occurrence of an FMD introduction because of the increase in international movement of animals and animal products and travel by animal producers. The extent and size of the potential disaster following an introduction of FMD would depend on the location of the introduction, rapidity of diagnosis, ease of employing eradication procedures, the FMD virus serotype introduced, and other environmental conditions at the introduction site.

In this study, we started our work from the conceptual point of FMD having been introduced into the United States. Our task was then to estimate the economic outcome over a 15-year period of a series of hypothesized disease situations and control efforts against them. These outcomes were compared to a baseline projection with the present preventive policies continuing to be successful in keeping the disease out. The background data for our assumptions about the dimensions of these situations and programs are contained in Technical Reports 1, 2, 3, 4, and 7. A description of the strategies upon which we based our analyses follows and is summarized in table 1. These strategies are:

1. *The current preventive policy of restricting imports of animals and animal products* which has been successful for some 48 years. During this time the implementation of an eradication or control program has not been necessary.

TABLE 1. *Strategies against FMD*

Strategy	Eradication a goal?	Animals slaughtered	Vaccine used?
Present preventive policy—import restriction	yes	(Not applicable)	(Not applicable)
Strict slaughter and quarantine ("stamp-out")	yes	Infected and exposed	no
Area vaccination	yes	Infected and exposed	yes
Endemic:			
Compulsory vaccination	no	Infected	yes
Voluntary control	no	no	yes, voluntarily

2. *A policy of eradication by strict slaughter and quarantine ("stamp-out")* would logically be the first policy employed in the United States should FMD be introduced. The Emergency Programs staff of APHIS maintains an efficient organization in readiness to employ this policy should the need arise. A major concern to these officials, and the one which was basic to the initiation of this study, is the degree to which this policy should be pursued before an alternative strategy is employed. In other words, "how many animals should be slaughtered in this eradication effort before the technical, economic, and/or political limits of feasibility are reached?" We suggest that an outbreak of FMD in the Midwest would be the most likely situation to produce this sort of crisis because of the high density and rapid movement of livestock and the relative lack of topographic features which would help deter the spread of the disease in this area. Consider the contrast of the 1928–29 outbreaks which were contained in small areas in California to the 1914 outbreak in the Midwest which spread quickly to 22 States.
3. *An area vaccination program* aimed at achieving eradication of FMD is an option which decisionmakers might consider if maintaining the "stamp-out" policy was approaching limits of feasibility. Under this policy, a large area surrounding the FMD introduction site, probably several States, would be established as an FMD control area with restrictions against

the export of animals and certain animal products, slaughter of infected and exposed herds, *and* vaccination of all susceptible animals. A vaccination program would be carried out in order to reduce incidence and would be followed by years of surveillance without vaccination until such time as it was judged that FMD had been eradicated. A similar strategy was successfully employed during the late stages of the campaign in Mexico.

4. *The endemic situation* would have to be allowed if the limits of the technical and economic feasibilities of the previous strategies had been reached. Essentially, the decision would be that the United States would have to "live with" some degree of endemicity of FMD for the foreseeable future as do many countries of the world today. The idea of eradication would have been given up, at least for a time. In the endemic situation, the United States would undoubtedly employ well-organized control procedures of vaccination and slaughter of infected herds in order to reduce production losses. In our study we estimated the economic impact of endemic FMD under: (1) a compulsory vaccination program (under Government regulation), and (2) a voluntary program (optional control by individual States and producers). To understand the main conclusions of this study, it is important to keep in mind that the benefit of implementing and operating any of the control or eradication procedures is the avoidance of "living with FMD" under the worst possible conditions—*endemic FMD with an early explosive outbreak followed by only voluntary control of the disease.*

DATA SOURCES AND ESTIMATION PROCEDURES

Following is a brief discussion of the data sources and procedures we used to estimate the epidemiologic impact, production losses, and control program costs. These were then used to estimate the economic impact of FMD and, in effect, establish the bases for our conclusions on the relative benefits and costs of various strategies against FMD.

1. *The Preventive Policy.* Costs of maintaining this policy were estimated by APHIS to be $10 million per year. This program prevents the entry of several other exotic livestock diseases besides FMD. But, we have charged the total cost to the prevention of FMD introduction.

2. *Eradication by Slaughter and Quarantine.* We used a slaughter rate of 1 percent of the total U.S. cattle, sheep, and swine population to estimate the economic impact of implementing this policy with a very severe disease situation. This rate is considered by most experts to be the highest rate of slaughter required under a "stamp-out" policy.

Based upon information from APHIS, program costs for such a high rate of eradication slaughter were estimated at $539 million. About 60 percent of this amount is for indemnity payments to producers.

The net effect of such a slaughter rate on increased prices to consumers was estimated from a livestock industry econometric model (described later in this report) to be $1,020 million. It is most likely that, in any realized FMD outbreak, the slaughter rate would be much less, like 0.1 percent in which case the program costs and the consumer price impact would be considerably less than the 1 percent slaughter rate.

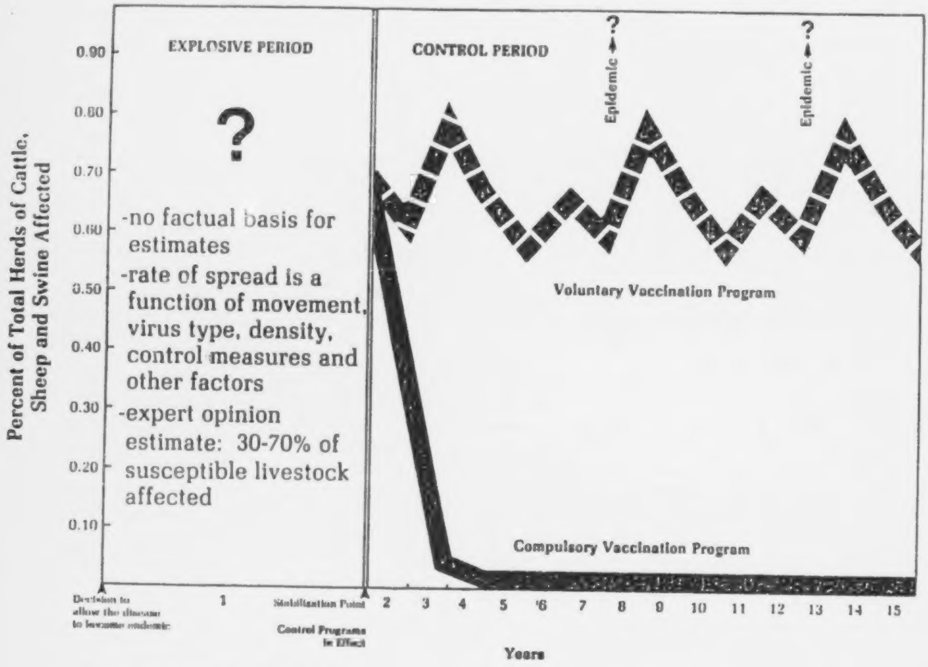
3. *Eradication by Area Vaccination.* As one can imagine, there are numerous variations of such a policy depending mainly on the area and the extent of infection. In order to specify a situation which we could estimate in our study, we selected an area of seven Midwestern States in which this hypothetical program would be carried out. (The complex assumptions about topics such as vaccine production and application, program administration, and animal products affected are treated in detail in Technical Report 3. Costs of producing, distributing, and applying vaccine are estimated at $3 per head.)

We assumed that the need to vaccinate would have ceased after the first year and that surveillance for new FMD outbreaks would be continued for another 2 years when the area would be declared "free" of FMD and the quarantine would be lifted. We assumed that 0.5 percent of the animals in the seven-State area would have to be slaughtered in the first year. And, this would increase consumer prices by about $100 million over a period of several years. The costs for personnel, vehicles, and supplies were based on APHIS estimates of program costs.

4. *The Endemic Situation.* As previously discussed, endemic FMD is the situation we are trying to avoid by the control programs referred to earlier. It is an admission that we have to "live with" some level of FMD because technical capacities have been overtaxed or because eradication costs exceed the resources we can justifiably expend.

To estimate the epidemiologic impact in the endemic situation, we assumed that during the first year after the decision to allow the endemic state of FMD in the United States, 70 percent of the susceptible animals would be affected because of the high susceptibility of our livestock population and possible difficulties in implementing adequate control procedures. This assumption was based on expert opinion and supported in part by results of the epidemic model described in Technical Report 7. At the end of this first year, we assumed that the early explosive period would have stabilized. If a compulsory vaccination and control program is started it would be well organized by that time with optimum control of FMD infection being achieved 2 years later. We used data from West Germany as the basis for the estimation of the number of herds affected because since 1966 that country has carried out a compulsory vaccination program similar to that which we would hypothesize for the United States. Clearly, there are differences between the livestock industries of the two countries which had to be reconciled through data evaluation and extrapolative procedures. These details are more fully described in Technical Report 1. Despite compulsory vaccination consumers would pay a net increase of $2.72 billion in higher prices compared to the "FMD Free" situation.

The worst possible impact for the United States would be endemic FMD with the employment of only voluntary vaccination and minimal control regulation. To estimate the infection rate after the early explosive period for this situation, we again used information from West Germany where epidemiologic data had been collected for many years prior to 1966, at which time officials initiated their compulsory vaccination program. We estimated that there would be two subsequent epidemics during the 15-year period for which we projected costs and benefits. This is consistent with the most severe experiences in European countries under endemic FMD conditions. These epidemiologic estimates for endemic FMD in the United States under both the compulsory and voluntary control programs are shown in figure C-1.



*Herds of cattle, sheep and swine affected.

Figure C-1. The estimated effect of compulsory and voluntary vaccination programs on endemic FMD in the United States based on experiences in Western Europe.

PRODUCTION LOSS ESTIMATES

To calculate the total production loss caused by FMD infection in livestock, we multiplied the total number of animals affected by percentage estimates of each of the various physical impairments suffered by affected animals such as death, permanent damage, uncompensated growth interruption, abortion and reproductive inefficiency, and decreased milk production. For example, we estimated the following annual losses in infected cattle:

1. *Death and permanent disability.* 0 to 12 months age—13 percent; and above 12 months—6 percent.
2. *Growth interruption.* Fifty percent of infected growing cattle would reach market weight 2 months later and would consume the equivalent of 1 month's more feed than uninfected cattle. Fifty percent of growing cattle are marketed with no delay and no additional feed requirement due to complete compensatory gain.
3. *Abortion and reproductive inefficiency.* Beef cows—10 percent abortion rate and a resulting identical loss in calf crop. No additional loss was calculated due to delay in breeding. Dairy cows—10 percent abortion rate for pregnant cows (three quarters of the dairy cows) and a 2-month delay in breeding of open cows and heifers.
4. *Decrease in milk production.* 1,000 pounds for each cow which aborts. Decreased milk production from general illness and inflammation of teats and mammary gland tissue varies with degree of damage and stage of lactation. The infected milk cows were divided into five categories to reflect this variation, as follows:

a. One-third lose 10 days' production from illness and then return to full production.

b. One-sixth lose 14 days' production and then return to full production.

c. One-sixth lose the remainder of the last half of their lactation period production.

d. One-sixth lose all of their lactation production because of mastitis.

e. One-sixth are culled because of permanent damage to the mammary gland from mastitis.

With the exception of decreased milk production,

losses in similar categories were calculated for swine and sheep. In the case of swine, the evidence available indicates that a higher (80 percent) death loss in piglets should be estimated. The above estimates of physical losses were based on an evaluation of available data and expert opinion. They are discussed fully in Technical Reports 2 and 8.

THE ECONOMIC ANALYSIS

We used an annual econometric simulation model of the U.S. livestock industry to develop a set of baseline estimates and to assess the impacts associated with alternative FMD control and eradication policies over a 15-year period (1976–1990). The model we used was an adapted version of a model developed by the Commodity Economics Division, Economic Research Service,[1] USDA. The price and output results generated by the model were then utilized as the data for the benefit-cost evaluation discussed later. This annual model is dynamic in that it takes into account production and consumption adjustments over time resulting from changes in factor and commodity supplies and prices. It also incorporates the impacts of exogenous variables such as population, wage rates, annual slaughter capacity, and others. These dynamic adjustments over time, including interproduct substitutions, have been largely ignored in previous static (and excessively partial) studies on animal health economics. This model is described more fully in Technical Report 5.

The model generates the increased costs borne by consumers due to a supply decrease caused by production losses from FMD infection or from the slaughter required in a "stamp-out" eradication program. Under the assumed "worst possible," endemic situation, the reduction in beef supplies caused the consumer price to increase 12 percent the first year and 15 percent the second year. In later years, the size of this price increase was less pronounced because producers responded by increasing meat supplies. The estimated consumption and retail price impacts for beef are shown in table 2. This same simulation was done simultaneously for each of the products affected by FMD infection of animals. Because of reduced supplies and higher prices, consumption of fluid milk was estimated to be down 271 million pounds for the first year of the endemic situation. This resulted in an initial-year consumer price increase of 8.4 cents per hundredweight. In later years, the average impact was much less, partially as the result of an exogenously projected decline in fluid milk consumption even in the absence of FMD. For swine, the consumption decline in the first year of the endemic situation was estimated at 564 million pounds. This, in turn, gave rise to an 8-cents-per-pound increase in the consumer price for pork. This sharp impact estimated for pork supplies and prices is followed by a fairly rapid return to more normal supply-price relationships in subsequent years.

In this study, some issues were considered for analysis and then later rejected because they seemed to lead to conclusions which could not be defended as rigorously as the main conclusions either because data was lacking or because the issue itself was difficult to specify or resolve. One such issue is the negative effect FMD would likely have on certain businesses associated with the livestock production and marketing industry. We recognize that there would be such secondary effects resulting from widespread FMD infections in the United States. But, such effects tend to be transitory, difficult to quantify, and probably exist mostly in the form of transfer payments between economic sectors. Another issue is the death loss in wild ruminants (deer, elk, moose, and antelope) due to FMD infection. This is a loss that can be expected, but we do not have an adequate basis for estimation of its physical size and its economic impact. And, of course, it would vary greatly by geographic area. Much of the decrease in money spent on big game hunting can be expected to be diverted rapidly to other outdoor sporting activities or to big game hunting in geographical areas not impacted by FMD.

The question of the effect of endemic FMD on our exports of animal products came up frequently because most countries which do not have FMD could be expected to ban our products to avoid the introduction of FMD into their livestock populations. We export almost $0.5 billion annually in animals and animal products to countries which are free of FMD. In our analysis we did not include this as a loss because we were not able to predict which countries would ban which products and, more importantly, because many of these products could be marketed in other countries which have some degree of endemic FMD. Most animal products which the United States exports probably could not be diverted to domestic use because they have a relatively low demand preference in this country.

TABLE 2. *Estimated effect of endemic foot-and-mouth disease on the consumption and retail price of beef for a 15-year period*[1]

Year	Civilian consumption of beef (Million pounds carcass weight)		Retail price of beef (Cents per pound)	
	Benchmark (No FMD)	Differences with endemic FMD	Benchmark (No FMD)	Differences with endemic FMD
1976	27,960	−1,952	157.77	19.00
1977	28,396	−2,196	156.11	23.95
1978	30,249	−316	150.33	4.96
1979	31,799	−168	136.29	11.56
1980	33,292	479	132.16	1.65
1981	34,451	−528	134.64	19.82
1982	35,256	−408	144.55	9.91
1983	35,824	760	154.46	−11.56
1984	36,369	535	162.72	−10.74
1985	37,022	674	165.20	−23.95
1986	37,814	−1,228	165.20	20.65
1987	38,698	−1,212	161.90	2.48
1988	39,563	−393	161.90	7.43
1989	40,362	−582	163.55	4.96
1990	41,056	−166	173.46	8.26

[1] *These estimates were generated by the ERS annual simulation model of the U.S. livestock industry which was adapted to receive the supply decreases caused by FMD. Annual production losses were those estimated to occur as a result of allowing FMD to become endemic in the United States with only voluntary control procedures. The simulation takes into account producer and consumer responses to price changes, the interdependencies of livestock products and substitute products such as fish, and the technical conversions inherently present in the livestock industry such as reproduction cycles and feed supplies. As a matter of convenience, the period of 1976 through 1990 was used for this estimation. This in no way, however, implies a prediction of the time of an introduction of FMD into the United States.*

Similar estimates were made of the effect of FMD on pork and milk consumption and on the consumption of substitute commodities such as chickens and eggs.

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[1] *Now part of the Economics, Statistics, and Cooperative Service.*

The major findings and benefit-cost relationships associated with implementation of the different strategies are shown in table 3.

TABLE 3. *Ranking of control and eradication policies against FMD in terms of benefit-cost ratios and discounted present values, 1976–1990*

Policy	Discounted present value[1] DPV		Net discounted present value (DPV of benefits less DPV of costs)	Benefit-cost ratio
	- - - - Millions of dollars - - - -			
	Benefits[2]	Costs		
Preventive policy	11,650	92	11,006	120.6
Eradication by strict slaughter and quarantine "stamp-out"	10,630	539[3]	10,091	19.7
Eradication by area vaccination	11,550	690	10,860	15.7[4]
Compulsory vaccination control program with endemic FMD	8,931	4,196	4,735	2.1

[1] *Discounted present value is "the current value" of the benefits or costs of specific programs considered. It is a useful way of comparing current and future costs with current and future benefits which occur over time. The discount rate used was 8 percent per annum.*

[2] *The benefit amount of $11.65 billion is the estimated net increase in cost to consumers because of the inefficiency of production of meat and milk products caused by endemic FMD with only voluntary control. Avoiding this cost is the benefit of successful control programs. Except for the prevention policy, which successfully keeps out FMD completely, each of the other policies is implemented with nonrealization of a portion of this estimated amount ($11.65 billion) of benefits. Under "stamp out," the program itself involves a decrease in animal product supplies which reduces the total net benefits (losses prevented) to consumers from $11.65 billion to $10.63 billion. The animal slaughter under an area vaccination program, in turn, results in consumers paying $0.10 billion in increased prices compared to the non FMD baseline case; so the total benefit would be $11.55 billion. In the case of national compulsory vaccination with endemic FMD, the no FMD benefit of $11.65 billion was reduced by $2.719 billion because of the impacts of the disease.*

[3] *This $0.539 billion amount is for an eradication slaughter rate of 1 percent of total livestock and is made up of program costs of which about 80 percent is indemnity payments.*

[4] *This benefit-cost ratio should not be compared to the one for eradication by "stamp-out" because eradication by area vaccination would only be employed if the "stamp-out" approach had become technically and/or economically infeasible. It, therefore, is the benefit-cost ratio of a "next-step" in eradication strategy planning.*

SUMMARY OF MAJOR CONCLUSIONS

The major conclusions of our study are as follows:

1. If FMD is introduced into the United States and leads to a serious epidemic followed by an endemic situation with only voluntary control, the discounted present value of losses (mainly in the form of increased consumer costs for animal products) for a 15-year period is estimated to be almost $12 billion. This then is the benefit of programs which prevent this undesirable outcome from occurring.

2. The present policy of restricting the import of animals and animal products is overwhelmingly justified by a benefit-cost ratio of 120 to 1.

3. The strict slaughter-and-quarantine policy against FMD would be within limits of economic feasibility even to the point where as high as 1 percent of the livestock was slaughtered in the eradication effort. Such a massive eradication program still yields a benefit-cost ratio of 19.7 to 1. For eradication efforts in which a lower number of animals would have to be slaughtered, say, 0.1 percent (as in the 1914 outbreak), the benefit-cost ratio would be considerably higher. Use of a straight-line relationship to estimate the cost for a 0.1 percent slaughter is probably the most reasonable procedure available and is, in fact, supported by cost data from the recent hog cholera eradication program in Northeastern United States. Using this procedure, the cost of such an eradication program with a 0.1 percent slaughter rate is estimated at approximately $54 million and the benefit-cost ratio about 190 or 200 to 1.

4. From the standpoint of its economic evaluation, the area vaccination approach to eliminating FMD (with a benefit-cost ratio of 15.7 to 1 for our example) would appear to be a feasible alternative following the "stamp-out" policy. But serious questions must be raised about the technical and political feasibility of containing a large area of the United States in a disadvantaged marketing position for the extended time period of 3 years or more. Also we question the feasibility of containing the FMD virus in such an area given the contagiousness of the disease and the potential incentives for illicit transport of animals and other carriers of FMD virus to areas with susceptible animals.

5. The relatively low benefit-cost ratio estimated for compulsory vaccination implies that there could be a high payoff for new technology leading to improved FMD vaccines and to their more efficient application.

BENEFIT COST ANALYSIS OF MEDFLY ERADICATION IN CENTRAL AMERICA

Introduction

The Animal and Plant Health Inspection Service of the USDA, with Mexico and Guatemala, maintains a barrier to prevent Medfly (*Ceratitis capitata*) from entering Mexico from Guatemala. APHIS is evaluating the feasibility of eradicating Medfly from Central America and Panama and establishing a new barrier near the Panama-Colombia border. Medfly attacks a wide range of fruit and vegetable crops in Central America; the most important economic damage is done to citrus, coffee, and other fruits and vegetables. In addition, Central America incurs the cost of treating growing crops, and the cost of government quarantine and treatment to hinder the spread of Medfly in Central America and Panama. The United States faces a risk of Medfly introduction from Central America; moving the Medfly barrier to Panama will reduce this risk.

Medfly Eradication: Costs and Benefits

Costs

APHIS-PPQ staff has developed a plan to eradicate Medfly from Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, and Panama. The estimated cost totals $349 million over a period of 9 years (Table 1). The barrier zone at the Panama-Colombia border, established in year 10, following eradication, is estimated to cost $23.1 million per year. The estimated dates Medfly is expected to be eradicated from specific countries are presented in Table 2.

The current Medfly program in Mexico and Guatemala is estimated to cost $13.9 million in 1985. Contributions from the United States total $7.9 million; Mexico, $4 million; and Guatemala, $1.2 million.

The eradication plan is an alternative to the current program which will operate into perpetuity unless another alternative is selected. As such, the cost of the current program is essentially a fixed cost. The real cost of any alternative is the incremental cost over and above the cost of current program. The incremental cost of the eradication project is $238 million over 9 years, plus the incremental cost of $9.2 million per year to operate the Medfly barrier at the Panama-Colombia border (Table 3).

Benefits

The benefits include: (1) the value of risk reduction to the United States; (2) the value of reduced crop losses in Central America for citrus, coffee, and other fruits and vegetables; (3) treatment cost savings to Central American farmers; and (4) savings in public costs for treatment and quarantine in Central America and Panama. The values for reduced crop losses, farm-level treatment costs, and public costs for quarantine and treatment were provided by an interagency technical evaluation team. The value of the risk reduction to the United States is developed in Appendix 2.

Estimated crop loss in Central America and Panama totals $36.5-$92.2 million annually, depending on the assumptions used for citrus production and coffee losses to Medfly (Table 4). About 50 percent of total losses are due to coffee (assuming a 7% loss). Farm level treatment cost and public costs for quarantine and inspection are negligible.

Based on an expected value analysis, eradicating Medfly from Central America would produce benefits of $0.3-$2.3 million per year (see Appendix 2).

The estimated flow of benefits over the project life is based on the economic benefits starting the year following complete eradication for a given country (Table 5). Where eradication is expected to take more than 1 year, benefits are phased in equally over the eradication period. Full benefits will begin accruing in year 10. The assumptions used to estimate these benefits are presented in more detail in the following section.

Economic Analysis

Method

The eradication project is analyzed using a partial equilibrium approach. That is, only direct costs and benefits of the project are included. Secondary costs and benefits and other associated effects are not addressed. The economic worth of the project is analyzed using discounted cash flows of cost and benefits over a 25-year period (at 12.5% discount rate). Although the costs and benefits theoretically continue into perpetuity, a 25-year time horizon is used because of uncertainties with respect to risk of reinfestation and the production and demand for Medfly-affected commodities in the distant future.

Assumptions

Budget: The incremental cost of the eradication plan (Table 3) is the cost for the program.

Benefits: Benefits, by country (Table 4) and by project year (Table 5) are used for the economic analysis. Benefits from reduced treatment cost and government expense for quarantine and inspection are used as given. Crop losses for citrus and coffee are modified to address uncertainty regarding data accuracy and market potential.

Citrus: Two estimates of citrus losses are used:

1. Both are based on 28 percent current losses ending after Medfly is eradicated (i.e., 28 percent yield increase.)

2. One estimate (the higher of the two) is based on production and price data provided by the Medfly Technical Committee (MTC)—developed by Organismo International Regional de Sanidad Agropecuaria (OIRSA).

3. The second estimate is based on FAO (Food and Agriculture Organization of the United Nations) production estimates and OIRSA unit values. See Table 4 for estimates by country.

4. Because price elasticities for domestic citrus consumption in Central America are unavailable, the price change that will occur when citrus production increases is not estimated. In effect, the analysis assumes all increased production is marketed at current prices. See Appendix 2 for a discussion of price effects from increased supply.

Coffee: Two estimates are prepared for economic benefits from Medfly eradication. Considerable uncertainty exists as to actual damage to coffee from Medfly. Estimates range from a 7 percent loss in Africa (25) to estimates of zero, 2 and 5 percent in Central America (8, 9). The USDA's Agricultural Research Service is replicating the study done in Africa to determine coffee loss from Medfly under Central American conditions. In addition, world coffee market conditions and projections raise serious questions about the ability of Central America to increase coffee exports (22). See Appendix 2 for a discussion of the world coffee market.

1. Both estimates are based on MTC (OIRSA) data for production and value.

2. The higher estimate is based on a 7 percent loss. This implicitly assumes the increased yield is marketed at current prices.

3. The second estimate is zero loss. This reflects the possibility that losses are currently negligible, and/or increased production cannot be marketed at current prices.

Other: Based on 2 percent current losses to other vegetables and fruit attacked by Medfly. Data provided by the MTC from OIRSA.

Scenarios

To model some of the uncertainty regarding potential benefits from increased output of citrus and coffee, and uncertainty in project costs and potential benefits to the United States, four scenarios were developed to present a range of potential outcomes (Table 6). These scenarios include a range of benefits from reduced Medfly damage to citrus and coffee, and value of risk reduction to the United States. In evaluating large agricultural projects it is common to include 0-15 percent of total cost to allow for contingencies (7). Scenario 4 includes 15 percent of total costs to allow for contingencies.

Results:

Based on discounted cash flow analysis over a 25-year period, the benefit-cost ratio for the project ranges from 2.5-0.8, depending on the scenario (Table 7). Scenarios 1 and 2 both include benefits from an assumed 7 percent increase in coffee production. They differ only in the source of citrus production data. Their benefit-cost ratios (2.5 and 2.2) are relatively close, indicating the economic feasibility is not very sensitive to variations in estimated citrus production. That is, citrus benefits for scenarios 1 and 2 differ by 30 percent (Table 4), but the final benefit cost ratios differ by only 10 percent.

The major determinants of the economic feasibility of Medfly eradication are (1) the actual coffee losses due to Medfly, and (2) the assumptions regarding the potential for marketing 7 percent more coffee from Central America. This is evidenced by the difference in benefit-cost ratios for scenarios 2 and 3. The only significant difference between scenario 2 and 3 is a 7 percent coffee increase in scenario 2 and none in scenario 3. If coffee yields are assumed to increase at 7 percent (and all production is marketed at current prices), the project is economically feasible. If coffee yields do not increase or increased production is not marketed, the project is not economically feasible.

FEASIBILITY OF SCREWWORM ERADICATION IN CENTRAL AMERICA

BACKGROUND

The U.S.-Mexico screwworm eradication program will be successfully concluded by December 1984. A barrier zone will be maintained in southern Mexico at a cost of $27 million/year to prevent screwworm reentry. An alternative to maintaining this barrier is being investigated. A cost benefit analysis was conducted to evaluate its economic feasibility.

PROPOSED PROGRAM

Eradication to Isthmus of Panama, with a barrier zone maintained in Darien Gap at the Panama-Colombia border. Program costs estimated at $37 million/year for 2 years; $50 million/year for next 4 years; $10 million for fly production facility in Panama; barrier zone maintained at annual cost of $10 million (saving $17 million annually over cost of Mexican barrier).

Benefits were estimated for savings in barrier zone operation and screwworm losses to cattle and other livestock that would be prevented. Screwworm losses prevented were estimated using benefits of Mexican screwworm eradication estimated by U.S.-Mexico Screwworm Eradication Commission.

ANALYSIS

The analysis focuses on the incremental costs and benefits above and beyond the costs of maintaining the Mexican barrier zone. Any benefit from the Mexican barrier will also accrue to the proposed program, making a comparison with the Mexican program unnecessary. Incremental benefits will accrue to Central America and the remaining part of Mexico where the screwworm may be eradicated. While the analysis does not quantify benefits to the United States and northern Mexico, there will be some reduction of risk of reinfestation of those areas if the barrier is moved to Panama.

Similarly, the costs of the Mexican program will be incurred only if the program is not selected. As a result, they are not included in the analysis; only costs and benefits resulting directly from the proposed program were analyzed.

RESULTS

Comparing the discounted costs and benefits over a 20-year period, the project is economically feasible. The benefit-cost ratio and net present worth are as follows:

Benefit-cost ratio = 2.92

Net present worth = $131.3 million
(at 12.5% discount rate)

The following table presents the benefit-cost ratio and net present worth of the program under various contingencies. The baseline contingency is simply the program as given, without any changes. With the exception of the specific changes indentified, all other factors are held constant in each contingency. For example, when costs are increased 50%, the time schedule and benefits are the same as in the baseline program. Part of the program benefits are anticipated savings from operating the barrier zone in Panama. The contingency labled "no barrier savings achieved" is where, due to unforseen problems, the cost of maintaining the barrier zone in Panama is the same as in Mexico.

Contingency	Benefit-Cost Ratio	Net Present Worth * ($ million)
Baseline (program as given)	2.92	131.2
Costs increase 50%	1.23	37.4
Costs increase 100%	0.78	(56.6)
Costs decrease 25%	12.76	183.9
Benefits reduced 50%	0.39	(156.6)
Time reqd. doubles	1.32	29.2
Time reqd. doubles, costs up 50%	0.53	(105.4)
No barrier savings achieved	2.13	77.1

* Negative numbers in parentheses.

These results indicate the program is economically feasible if:

- Program objectives are achieved within original time and cost estimates, or
- Costs increase 50 percent, or
- Time required increases by 100 percent, or
- No barrier savings are achieved

Given the degree of uncertainty in program costs due to inflation in Mexico, the benefit-cost ratios of 1.23 and 1.32 (costs increase 50 percent and time required doubles, respectively) may be considered as indicating questionable economic feasibility under these contingencies.

The program is not economically feasible if:

- Annual costs increase 100 percent, or
- Anticipated benefits are reduced by 50 percent, or
- Time required doubles and annual costs increase 50 percent.

The economic feasibility of the program is very sensitive to cost reductions. Decreasing annual costs by 25 percent increases the benefit-cost ratio to 12.8, compared to 2.9 for baseline program.

An assessment of the social and political benefits and costs of this program are beyond the scope of this brief analysis. These items are not accounted for in the benefit-cost study, nor are the public health aspects of eradicating screwworm.

Question: Can you quantify how much the risk to the United States has decreased by moving the border for the protected area further and further away?

Answer: By establishing and/or maintaining barriers at the Panama-Colombia border for foot-and-mouth disease, screwworm, and the Medfly, the probability of natural spread of these pests to the United States would be reduced virtually to zero. The risk of artificial spread would be reduced commensurately with the distance of the infestation from our borders. A full analysis of the proportionate reduction in risk as these barriers move progressively southward through Central America has not yet been undertaken.

Question: Could you do that for each of the programs and provide it for the committee?

Answer: We are currently studying the issue of risk reduction associated with these programs and will certainly keep the committee informed of our progress in this area.

ANIMAL DAMAGE CONTROL

Question: Have you identified areas in the Animal Damage Control purview that were neglected when the program was run by the Fish and Wildlife Service?

Answer: We have identified a number of areas we felt could be improved upon.

Question: If so, what are these areas, and what would be the funding requirements to deal with them?

Answer: We identified a number of areas that either had been neglected or that we felt should be improved upon. The first improvement which we implemented immediately was a reduction in the number of Regional Offices from seven to two. This contributed to a more efficient management structure for the program and a reduction in administrative costs. We also realized the need for public input on ADC policy issues and immediately moved to establish a National Animal Damage Control Advisory Committee to provide advice to the Secretary on issues of significance.

Other areas of concern involve problems at the Denver Wildlife Research Center. They include fully implementing the Good Laboratory Practice Standards established by the Environmental Protection Agency (EPA), meeting the Animal Welfare Act standards, and reducing the amount of hazardous chemicals and chemical wastes which had accumulated at the Center. In addition, there was also no effective procedure established to prioritize ADC research needs.

We also discovered an overall lack of comprehensive data available on the extent and magnitude of economic losses due to wildlife damages. This complicates management decisions and is especially troublesome in the eastern States where blackbirds are a particular problem and other concerns are surfacing.

We are currently evaluating these problems but have not developed an estimate of the associated funding implications. We are taking a number of steps within available funds to correct these deficiencies. We have had an EPA evaluation of the practices at DWRC and have received a report on their findings which we are evaluating. We have requested an Animal Welfare review by Veterinary Services personnel and plan to work with the Agricultural Research Service on comprehensive assessments of economic losses. Additionally, we have asked the American Society for Testing and Materials to provide recommendations on an appropriate process for prioritizing ADC research needs. The U.S. Fish and Wildlife Service has acknowledged responsibility for the hazardous chemical cleanup and we are currently working with them to expedite this effort.

I understand that Animal Damage Control in APHIS must get permits from the Fish and Wildlife Service to carry out portions of the program's work.

Question: Since the transfer of the program to APHIS, have you encountered any difficulties in getting these permits?

Answer: The Fish and Wildlife Service is responsible for providing the permits required for APHIS to respond to damage involving threatened and endangered species, eagles, and migratory birds. Some inconsistencies exist from region to region in the Fish and Wildlife Service's provision of permits to APHIS. We are currently working with them to correct the problem.

Question: Would you please provide a report to this committee outlining the permit system and any problems that you may have encountered with the process of getting permits?

Answer: We currently must apply for these permits at each Fish and Wildlife Service Regional Office. The limited experience with this process so far is not sufficient for a thorough analysis of the problems of the system. By the end of 1987, we will have completed the cycle of permit needs and will be able to provide a more detailed report to the Committee at that time.

GRASSHOPPER

For the grasshopper control program, you propose a decrease of over $7 million from the $10 million dollar level that you have available for Fiscal Year 1987. You had considerably more than that available for both 1985 and 1986.

Question: What are your projections for the needs for grasshopper control for 1987?

Answer: At this early date, we estimate that 5,436,000 acres could require treatment in FY 1987. If the entire amount is treated, the Federal cost will be $8,181,000. The estimates could change significantly once the impact of winter conditions on grasshopper populations and the level of State and private participation in the program are determined.

For 1988, you are proposing that no funds be made available for grasshopper control. Two-thirds of the money that you have spent on grasshopper control has been used to control the hoppers on Federal land.

Question: Who do you expect to pay for the Federal land control in the future?

Answer: Based on program history, we anticipate that the majority of costs for treatment on Federal lands would be borne by the United States Department of the Interior (USDI) in accordance with provisions of the Food Security Act of 1985. In FY 1986, for example, approximately 83 percent of Federal land treated was under the jurisdiction of USDI. Federal land requiring treatment should be close to that figure in FY 1987. For FY 1987 and FY 1988, we believe that any infestations on Federal lands which do occur can be handled through the reimbursement provision with USDI, or with funds carried over in the no-year control fund.

Question: Do you have any reason to expect that there is not going to be a grasshopper problem in 1988?

Answer: In all likelihood, we will have to treat some acres in FY 1988. We believe, however, that our control efforts in FY 1985-87 and a natural downward cycle in grasshopper populations should mean considerably smaller populations of grasshoppers over the next several years, thus reducing the need for treatments. This is consistent with our experience with this pest over many decades.

Question: You have initiated the first year of a five-year integrated pest management (IPM) project for grasshoppers. Can you briefly tell me the status of this project?

Answer: The goal of the IPM project is to find long range, environmentally acceptable solutions to the problem of grasshopper infestations on Federal lands. Cooperating with APHIS in this effort will be the Agricultural Research Service, Economic Research Service, Forest Service, Cooperative Extension Service, Environmental Protection Agency, Bureau of Land Management, Fish and Wildlife Service, and the National Park Service.

Operations are scheduled to begin as soon as the spring grasshopper hatch begins. Activities will include improving survey methodology and data analysis to better predict the need for and timing of treatments; refining, developing, and integrating chemical, biological, and range management methodologies; and assessing environmental impacts. The project will be carried out at two demonstration sites - one in McKenzie County, North Dakota, and the other at the Bureau of Land Management's Boise, Idaho, District. We have established the project headquarters in Boise, Idaho.

Question: At what level do you expect to continue this project?

Answer: In FY 1987, we plan to obligate $3 million for the project. In FY 1988 our budget proposal includes $2.1 million to cover the project's costs. For the remaining three years, we will need to evaluate the results of trials before finalizing specific budget amounts.

ANIMAL WELFARE

In Fiscal Year 1985 and 1986, you requested redirections of funds into the Animal Welfare Act Enforcement line item.

Question: If we are to adequately fund the program for Fiscal Year 1988, what level would we need to appropriate?

Answer: We believe that the FY 1988 budget request includes adequate funding for the animal welfare program. In FY 1986 we improved the efficiency of this program by prioritizing inspections and training our veterinarians to better understand and carry out their duties under the Animal Welfare Act.

Question: In order to conduct an average of two inspections of each registered research facility, licensed animal dealer, and other inspection sites under the Animal Welfare Act, what level of funding is required for Fiscal Year 1988?

Answer: The FY 1988 budget request for the animal welfare program allows for an average of one and one-half inspections annually of each registered research facility, and one annually at licensed animal dealers and other inspection sites. Increasing the number of inspections to two would cost an additional $1,253,000. However, we believe that current program plans will provide adequate enforcement because of our efforts to prioritize inspections.

Question: Have you taken into account the requirement under the improved standards for laboratory animals amendments that follow-up inspections of any research facility which failed to comply with the Act's minimum standards must be continued until the facility is in full compliance?

Answer: Yes, we have considered the implications of the Improved Standard for Laboratory Animals Amendments and will make all possible efforts to comply with the amendments to the extent possible with available funds.

Question: Is the funding for the information service at the National Agriculture Library included in the APHIS budget? If not, is it included elsewhere?

Answer: No, the funding for the information service at the National Agricultural Library is not included in the APHIS budget. To our knowledge, the funding is not included elsewhere.

Question: How much money was spent on the Animal Welfare Act last year?

Answer: APHIS spent $6,036,000 on the Animal Welfare Act in FY 1986.

USER FEES

Mr. Secretary, you propose to implement user fees for the Animal and Plant Health Inspection Service in order to generate almost $86 million dollars.

Question: How will the user fees be levied? Against whom? In what amount?

Answer: We will be pleased to provide that information for the record.

APHIS USER FEE PROPOSALS

Program	Levied Against Whom?	Manner in Which Levied	In What Amount
Agricultural Quarantine Inspection	Each arrival in the United States of a - commercial vessel - commercial truck - railroad car. - airplane	Fee collected upon entry by APHIS or collection agent.	Total annual collections estimated at $85 million, including amounts currently recovered for overtime inspection.
	Each arrival in the United States of passengers aboard a commercial air or sea vessel.	Passenger fee included in in price of air and sea passenger's ticket.	Specific fee amounts to cover costs of respective services to be established by regulation.
Phytosanitary Certificates	Exporters of plant material.	Per certificate.	Total annual collection estimated at $1,800,000.1/
Veterinary Diagnostics	Importers and exporters. State laboratories.	Per test.	Total annual collection estimated at $1,565,000.1/
Veterinary Biologics	All licensed producers and users of program resources.	Per serial produced.	Total annual collection estimated at $8,681,000.1/
Import/ Export	Importers and exporters.	Per inspection. Per test.	Total annual collection estimated at $8,649,000.1/

1/ Program workload data are currently being developed to determine the amount of individual fees.

CONTINGENCY FUND

Question: What is the current status of your contingency fund for citrus canker and avian influenza?

Answer: Of the $5,000,000 appropriated to the contingency fund and earmarked for citrus canker, we have released $2,100,000, leaving a current balance of $2,900,000. Of the $5,000,000 appropriated to the contingency fund and earmarked for avian influenza, we have released $740,000, leaving a current balance of $4,260,000.

Question: How much has been spent and what are you expecting to use for the remainder of 1987?

Answer: We have obligated $110,000 for citrus canker and $30,000 for avian influenza. We do expect to obligate the entire $2,100,000 for citrus canker and $740,000 for avian influenza during the course of this fiscal year. We do not currently foresee a need for additional funds for either program.

Question: Describe for the committee briefly how this money has been used?

Answer: The release of funds for citrus canker is intended to reverse a recent decline in the survey and regulatory aspects of the program exacerbated by the detections of "A-strain" citrus canker. To accomplish this, we are increasing the number of USDA personnel assigned to the project from 6 to 20, most of whom will function in a staff officer or supervisory capacity. In addition, $1,415,000 will be transferred to Florida through a cooperative agreement and will be used to fund salaries for temporary survey personnel hired by the State and for necessary materials, supplies, and equipment other than vehicles.

The funds released for avian influenza will be used to conduct a national survey to locate the sources of the disease and determine how it is being spread, to disseminate information on the disease, continue diagnostic and technical services to affected States, and develop a model State poultry health program.

LEAFY SPURGE

Question: Are you doing any work to combat the leafy spurge?

Answer: We are currently working to develop an action plan for control of leafy spurge which would become the basis for limited field activities scheduled to begin in FY 1988. Eventual testing of beneficial insects and their hosts will be carried out primarily at our biological control laboratory at Mission, Texas.

Question: What is the domain of leafy spurge?

Answer: Leafy spurge exists throughout most of the northern United States, with infestations in at least 30 States. The weed is a serious problem on rangeland causing losses to ranchers in the northwest, especially in western North Dakota and eastern Montana.

Question: What methods of control are available?

Answer: Applications of chemical herbicides, certain insect species, and the grazing of sheep are methods used to control leafy spurge with varying degrees of effectiveness.

Question: How successful are they?

Answer: Certain chemical herbicides have been shown to be effective, but are not appropriate for use in large areas due to cost considerations, or near sources of water supply due to environmental concerns. Several insect species are effective in helping control leafy spurge at different stages of the weed's development; however, none are available in sufficient quantities to permit their use at this time. Also, more testing is necessary on additional new candidate insects to ensure that they would not be harmful to other crops. Sheep have been effective only in limited circumstances, and do not appear practical as a large scale control measure.

Question: If a program of leafy spurge control and/or eradication were contemplated, what would it involve?

Answer: Due to the hardiness of the weed and limitations on the effectiveness of currently known control agents, total eradication of leafy spurge does not appear to be a viable alternative. However, we believe the weed can be effectively controlled. An effective control program would require an integrated pest management approach, combining the use of herbicides where appropriate with the use of other pest management techniques, with an emphasis on biological control.

MEDITERRANEAN FRUIT FLY

Question: In addition to the CAPMED project, do you have other projects to eradicate the fruit fly from Central America?

Answer: The only fruit fly program currently operating in the region is a cooperative effort with Mexico and Guatemala called the "Moscamed" program. Its goal is to prevent the northward spread of the Medfly into Mexico and the U.S. by eradicating the pest southward through Guatemala.

Question: Do you intend to use P.L. 480 funds for these projects?

Answer: P.L. 480 funds are used to support the Moscamed program and will be needed to support the CAPMED project.

Question: Have you done environmental assessments for your Mediterranean fruit fly projects in Central America?

Answer: A draft environmental assessment has been prepared by APHIS for the cooperative program in Guatemala. Environmental assessments for the CAPMED project have not been conducted.

Question: Have these been completed and, if so, what do they show?

Answer: A draft environmental assessment for the cooperative program in Guatemala has been prepared. The final assessment is expected to be ready by April 15, 1987. The environmental assessment completed for California in 1981 indicated that Medfly control measures such as those currently used in Guatemala posed no significant environmental impact.

Question: Do you use pesticides that are not approved for use in the United States for these projects?

Answer: The pesticide used in our aerial spraying operations in the Moscamed program is approved for use in the United States. A fumigant that is not registered for most uses in the United States is currently used by Mexico and Guatemala as a quarantine treatment for control of the Medfly in fruits and vegetables within those countries.

Question: If so, what are they, and why do you use them if we have found them to be dangerous in our country?

Answer: We do not use them in the eradication program. However, the governments of Guatemala and Mexico have permitted ethylene dibromide to be used within their borders as a regulatory treatment on commodities being moved from infested areas.

Question: How much money would APHIS need simply to maintain the fruit fly boundary at the Mexican-Guatemala border?

Answer: The cost to APHIS of maintaining the Medfly barrier at the Mexico-Guatemala border is estimated at between $7 million and $8 million per year. However, Guatemala's continued participation in the program is unlikely unless the barrier is moved further southward into Central America because they are reluctant to permit the continued use of pesticides unless the goal of the program is eradication rather than barrier maintenance. Attempting to maintain a barrier at its current location in Guatemala would require a significant increase in the cumulative use of pesticides. This is environmentally and politically unsound.

Question: Under the CAPMED project that you discussed, what would be the funding requirements for the duration of the project?

Answer: We estimate that the total cost of the CAPMED project would be $350 million over 8 years. This includes a 2-year preparatory phase of $58 million, followed by a 6-year eradication phase of $292 million.

Question: How long would it last and what would be required each year?

Answer: Based on a recent update of the 1985 feasibility study, the project would take 8 years to complete. Funding requirements for each year would be:

First Year	$31.3 million
Second Year	26.7
Third Year	54.2
Fourth Year	51.3
Fifth Year	53.0
Sixth Year	52.0
Seventh Year	51.8
Eighth Year	29.7
	$350.0 million

Question: Would other than United States Federal funds be used in this project?

Answer: The project could be a multi-nationally funded effort. We anticipate the involvement of several nations and international agencies in funding and carrying out operations, should a decision be made to begin the project.

Question: Do you require any matching funds to carry out this project?

Answer: No specific cost distribution formula has been determined at this time. However, without significant funding contributions from other donor countries and agencies, the project cannot be carried out.

BOLL WEEVIL

Question: How much have you spent on the three boll weevil programs in Fiscal Year 1986? How much do you plan to spend in Fiscal Year 1987?

Answer: We will be happy to provide that information for the record. The information follows:

	FY 1986	FY 1987 (estimate)
Southeast	$ 937,120	$ 840,000
Southwest	1,148,649	1,135,000
High Plains	909,835	944,000
	$2,995,604	$2,919,000

Question: If the referendum for eradication is approved in Florida, what would be the cost of continuing with the program in the Southeast?

Answer: We estimate the total cost for all participants to be $64,067,000 over 4 years. Of this amount, $40,100,000 would be the cost to cooperators, and $23,967,000 the Federal share based on the cost sharing arrangements used in the North Carolina - South Carolina program.

Question: You indicate that in the Southwest eradication program, your plans call for the program's completion in Fiscal Year 1987. Does this mean that boll weevil will be eradicated in that area by the end of the year?

Answer: No, we mean only that populations will have been reduced to such an extent that Federal involvement is no longer necessary.

Question: You also propose to eliminate your role in the High Plains program. What is the status of eradication in that area?

Answer: The goal of the High Plains program is not eradication, but rather prevention of the spread of boll weevil into West Texas. With a comparatively shorter growing season and fewer pesticide inputs, there is less economic benefit to be realized from eradication. Consequently, cotton producers in this area have not expressed an interest in establishing an eradication program.

Question: Is there a projected eradication date for the High Plains program?

Answer: Because the intent of the program is to prevent the pest's spread to West Texas rather than its eradication from a specific area, there is no projected eradication date.

PSEUDORABIES

Question: In what States has a pseudorabies pilot project been carried on to date?

Answer: The pseudorabies pilot project has been carried on in five States to date. They are Illinois, Iowa, North Carolina, Pennsylvania and Wisconsin.

Question: What methods are being used to control pseudorabies?

Answer: Federal regulations place restrictions on the interstate movement of pseudorabies infected and exposed swine to reduce spread between States. Additionally, nearly three-fourths of the States have pseudorabies requirements for swine they import. Quarantine of infected herds and testing or depopulation are also used in the control of this disease.

Question: What methods are being used to eradicate pseudorabies?

Answer: Once infected herds are found by such means as slaughter surveillance or area testing, the disease is eliminated by one of four basic methods: depopulation/repopulation; depopulation without repopulation; test and removal of reactors; and offspring segregation. During the pilot project, States used these methods to successfully eliminate pseudorabies from 97.5 percent of the 119 infected herds.

Question: What information do you have that States will pick up the responsibility for eliminating this disease?

Answer: Wisconsin, Pennsylvania, and Ohio have passed legislation that will continue pseudorabies control programs after the pilot project is terminated. Illinois is moving in that direction. Nebraska, Tennessee, Indiana, Michigan, and Missouri have either proposed or passed legislation relative to pseudorabies control.

ENDANGERED SPECIES ACT

In last year's Senate Report (99-438), the Committee asked you to submit a report detailing your enforcement program for violations under the Endangered Species Act or the Convention on International Trade and Endangered Species (CITES). This report is due by July 1.

Question: What progress have you made in this area?

Answer: APHIS is evaluating its enforcement of CITES and the Endangered Species Act, to determine how to carry out activities directed by the Committee without sacrificing its principal mission of preventing the entry of exotic plant pests and diseases. We plan to submit a report which outlines our enforcement program by the July 1, 1987 deadline.

BONT TICK

The tropical bont tick, a carrier of the livestock disease heartwater, infests several islands in the Caribbean.

Question: If heartwater was introduced into the U.S., what would be the effects on U.S. livestock?

Answer: Heartwater, if introduced into the U.S., would be extremely costly to the U.S. livestock industry. The disease causes a mortality rate of over 50 percent when introduced to adult susceptible animals in clinical conditions. There is a 5 to 10 percent expected annual incidence rate in susceptible herds.

Question: Does the tick's presence in the Caribbean present a real threat to U.S. livestock?

Answer: Ticks can be spread by many vectors, such as on humans, by way of clothes; on tick infested forage; and on tick infested livestock and other animals. These latter vectors are the most likely means of spread. Although the probability of these animals entering the United States from the Lesser Antilles has been not quantified, given the proximity of the Caribbean and the travel and trade between the region and the United States, the threat of the tick spreading to our shores is always present.

Question: Other countries and organizations have been discussing how to deal with the bont tick in the Caribbean. What has your role been in those discussions?

Answer: APHIS has provided technical assistance to the Caribbean Community, the European Economic Community, the United States Agency for International Development, and the Food and Agriculture Organization, who have met to develop recommendations for a coordinated regional approach to the management of tropical bont ticks in the Caribbean.

Question: Do you believe that bont ticks can be eradicated from the Caribbean? At what cost?

Answer: By utilizing a coordinated regional approach involving Caribbean Community veterinary officers, and the other organizations, we believe that tropical bont ticks can be eradicated from the Caribbean.

A recent preliminary feasibility study prepared by an interagency group studying the problem estimated that it would take 5 years and $26.3 million to eradicate bont tick from the Caribbean. Further studies and discussions are continuing to better refine the technical and fiscal requirements of bont tick eradication.

QUESTIONS SUBMITTED BY SENATOR SASSER

AGRICULTURAL QUARANTINE INSPECTION

Mr. Hawkins, the Administration has requested a reduction of some $6.5 million for the Animal and Plant Health Inspection Service in Fiscal Year 1988. You have told this committee today that because of the increased amount of traffic entering the United States, there is a greater threat of transported diseases and pests entering the United States than ever before.

Question: Do you believe that APHIS will be able to maintain adequate health inspection services under this budget as well as fully implement new programs which become necessary?

Answer: Yes, it is my belief that the proposal we have submitted will allow us to maintain an adequate level of overall agricultural protection by performing important functions which require Federal leadership and involvement, including quickly reacting to emerging serious threats. A key part of our request is a substantial increase for the agricultural quarantine inspection program, designed to improve our ability to keep pests and diseases out of the United States. In addition, funding is included to allow us to meet the Department's responsibility to regulate the emerging biotechnology industry.

Question: Are you prepared to meet new unforeseen problems as they arise?

Answer: We will make every effort to meet any unforeseen problems within the resources available. We have requested a $4.5 million contingency fund. In addition, when major emergency outbreaks occur, the Secretary has authority to transfer funds from other USDA accounts to APHIS to cover the costs of control and eradication.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

BRUCELLOSIS

Brucellosis eradication has always been one of my primary concerns, and I was pleased that Arkansas was recently upgraded from Class C to Class B. Even so, we are one of five States in which 90 percent of the remaining infection is concentrated. I fully believe every available resource should be made available and every effort continued to ensure the eventual total eradication of the disease in Arkansas and throughout the country.

Question: What are your specific plans in this regard?

Answer: We share your concern regarding the high level of brucellosis remaining in Arkansas. We intend to concentrate our efforts on quickly reducing brucellosis incidence throughout the Nation and improving the classification of the A, B and C States. Toward this end we are currently concentrating our resources in the high prevalence States, such as Arkansas. We will continue to work closely with the owners of infected herds in Arkansas to develop herd plans and emphasize the Uniform Methods and Rules of the brucellosis eradication program. In FY 1987 we will continue to provide Federal funds for calfhood vaccination in Arkansas, as well as, Mississippi, Florida, Oklahoma, Louisiana and Texas.

Question: Of the total funding level proposed, how much would be targeted for Arkansas?

Answer: Of the funds requested for brucellosis in FY 1988, $1,963,000 is targeted for Arkansas. This level of funding should be adequate for Arkansas to continue making the excellent progress they have made in recent years.

ANIMAL DAMAGE CONTROL

Farming interests in Arkansas have been perennially plagued by serious blackbird depredation. During the winter months, blackbird roosts cause health and nuisance problems. I am pleased that testing is being undertaken on the possible use of CPT as a toxicant in North Dakota, and believe that such research efforts are equally warranted to address Arkansas' problems. Thurman Booth, Arkansas State Director of APHIS' Animal Damage Control program, has done a very capable job of implementing a bird scaring effort. However, the effectiveness of this method will not increase dramatically until more effective techniques are developed.

Question: I fully believe an aggressive Arkansas-based research effort to develop roost toxicants is long overdue. What is your position on this?

Answer: We agree that more effective control tools are needed to reduce damage and nuisance caused by blackbirds. We are committed to developing a safe, effective toxicant which is environmentally acceptable. We have no funds budgeted for an

Arkansas-based research effort to develop roost toxicants. However, our pilot project in North Dakota plus ongoing research carried out at the Denver Wildlife Research Center and satellite centers in Florida, Kentucky, and Ohio are designed to develop tools which will be beneficial to other areas of the country which experience blackbird problems.

QUESTIONS SUBMITTED BY SENATOR COCHRAN

ANIMAL DAMAGE CONTROL

Question: The Animal Damage Control Program was transferred to APHIS from the Fish and Wildlife Service in April of 1986. What is the status of animal damage control activities currently underway in Mississippi?

Answer: We currently have one professional employee who works in both Mississippi and Alabama on animal damage problems. This person works with local authorities and property owners to reduce damage caused by migratory birds and beavers. ADC provides assistance with control problems on request and conducts demonstrations of available control techniques on a regular basis. Blackbirds are a major problem in Mississippi and our State director has been working with local authorities to eliminate problem roosts. At the present time, the harassment technique and modification of roost trees are the only available methods for controlling these problems. Our Denver Wildlife Research Center is working on the development of a roost toxicant which appears to be the most appropriate long term solution to controlling blackbirds.

Question: What kind of animals are used at the Denver Wildlife Research Center?

Answer: Coyotes, white rats, prairie dogs, six species of tree and ground squirrels, gophers, golden quail, pigeons, magpies, blackbirds, sparrows, starlings, finches, kestrels, geese, and ducks, are used at the Denver Wildlife Research Center.

Question: How are they housed?

Answer: They are kept in laboratory animal rooms, enclosed exterior pens, and open wire exterior pens.

Question: Who takes care of them?

Answer: Care is provided by laboratory technicians and supervised by scientists.

Question: How many are there?

Answer: About 3,000 animals are housed during an average year with up to several hundred present at any given time.

Question: Is the Center in compliance with the Animal Welfare Act? If not, why not?

Answer: The Center is in compliance with the Animal Welfare Act. Some space at the research center which we identified as not in compliance with the Animal Welfare Act is no longer used to hold animals.

BRUCELLOSIS

Your proposed appropriation language for the brucellosis eradication program provides for 40 percent minimum matching of funds by the State.

Question: What is the effect of this language?

Answer: This provision has been in place for many years and it has helped assure strong participation in the program. In practice, the overall contributions by States have far exceeded the 40 percent matching requirement. The States and industry have been full partners in the program and we expect the excellent cooperative relationship to continue.

Last year you indicated that your phasedown calls for having all States in Free or Class A status by 1991. You also indicated that you hope to achieve this by quickly making progress in the high incidence States, using depopulations of heavily infected herds in accordance with State by State eradication plans.

Question: Are you currently on target to meet the 1991 goal?

Answer: Yes, we are on target to meet that goal.

Question: What level of cooperation would you expect from the States if Federal funding for the program were substantially reduced in FY 1991?

Answer: We have worked closely with the States and industry to develop the phasedown plan. By implementing the plan over a 5-year period, all program cooperators will have time to adjust to the change in responsibilities. Therefore, we expect that the States will cooperate fully in FY 1991 and later years. Additionally, we expect that the infection rate will be substantially lower by FY 1991 in the high incidence States, thus reducing the level of State and industry expenditures required.

Question: What effect would such a reduction have on other animal health activities?

Answer: We believe the effect would be minimal. Activities such as surveillance and testing conducted as part of the brucellosis program and the system of animal identification have the additional benefit of helping identify other animal diseases. After the proposed reduction, most of the current surveillance and regulatory system will remain a Federal responsibility. The reduction in brucellosis funding would result in personnel reductions. In implementing these reductions, we would attempt to minimize the impacts, including geographical impact, on our ability to provide an expedient response to outbreaks of foreign animal disease.

BOLL WEEVIL

Question: Did the North Carolina/South Carolina boll weevil eradication program provide tangible benefits for cottongrowers?

Answer: Yes, the program is already producing a significant payback for the producers. One study showed that lint yields increased by 50 to 55 pounds per acre in North Carolina, with a reduction of $28 per acre in production costs.

Question: Could similar benefits be expected in other States?

Answer: Yes, we would expect similar benefits in other States.

Question: What is the status of producer efforts to approve participation in a boll weevil eradication program in Georgia, Alabama, and Florida?

Answer: Growers in those States are moving to overcome the final hurdles for an expanded program. Georgia growers passed their referendum in October of 1986. In Florida, legislation has been introduced to allow that State's growers to vote on a referendum, with passage considered likely. In Alabama, eight additional counties are moving to join the 13 which passed a referendum in 1985. Approval is expected within 2 months.

Question: What would be the annual cost of such a program? For how long?

Answer: Plans call for a 4-year program. We will be happy to provide that information for the record.

[The information follows:]

Expanded Southeast Boll Weevil Eradication Program

	Year 1	Year 2	Year 3	Year 4	Total
Grower Fee	$ 5,100	12,700	12,700	9,600	40,100
USDA Cost-Shared	4,700	11,500	400	400	17,000
Non-Cost Shared	3,304	3,441	111	111	6,967
	$13,104	27,641	13,211	10,111	64,067

Question: Are you prepared to participate with the producers in an eradication program in these States as you did in the Carolinas?

Answer: APHIS is technically capable to participate if directed to do so and funds were made available.

Question: Could a program begin as early as this fiscal year (FY 1987) if funds were made available for Federal participation?

Answer: Yes; however, delays in funding availability will impose limits on what can practically be accomplished the first year. Such delays may restrict the scope and intensity of program actions.

SCREWWORM

Question: You have from time to time reported to this Committee on your plans and progress in conducting, within available funds, screwworm eradication activities south of the Isthmus of Tehuantepec. Please describe in some detail the current status of these efforts.

Answer: In FY 1986 we amended the 1972 agreement with Mexico to allow the Commission to eradicate screwworms in the Yucatan Peninsula and make agreements with the Central American countries and Panama. The Mexico-U.S. Commission, pursuant to the amendment, started an eradication program in the Yucatan Peninsula in May 1986, which we expect to complete by the summer of 1987. Similarly, the Mexico-U.S. Commission signed an agreement with Guatemala on December 10, 1986, to allow eradication of screwworms from the country. Initiation of the program should begin soon. Also, we have initialed an agreement with Belize that we hope will be signed by the summer of 1987.

We plan to use a minimum number of sterile flies as we move south of the Isthmus of Tehuantepec. When the number of sterile flies required in the freed areas of Mexico as well as the sterile fly barrier is reduced, we will gradually increase the number of sterile flies dispersed in Guatemala and Belize. When each subsequent area is eradicated, we will release fewer sterile flies there and move southward to free additional areas.

Question: The 1985 study submitted to this Committee estimated that a program to eradicate the screwworm fly throughout Central America would cost $50 million annually for 5 years. Is that estimate still valid?

Answer: Actually, the cost estimates are now far more favorable. The FY 1985 report did not take into account the devaluation of the peso and estimated the total cost of the program, some of which could be funded through contributions from other countries. Also, we have achieved other economies in the program following management reviews directed at cost cutting. Therefore, we expect to continue progress in Guatemala and Belize at the current Federal funding level and could establish a new screwworm barrier in Panama at an annual operating cost very close or equal to the current funding level.

Question: The study indicated that such a program would require a new sterile fly facility in Panama? Why? When would it be needed?

Answer: A sterile fly production facility in Mexico would provide insects to eradicate screwworms from the 5 northern countries of Central America. Once this is achieved, the possibility of the escape of fertile insects from the facility would make it risky to continue its use. Also, transportation costs from the facility in Tuxtla Gutierrez would be cost prohibitive. The production facility in Panama will be smaller but with sufficient capacity to complete the eradication program to Panama. This facility would then be used to produce the insects for the maintenance of the sterile fly barrier in Panama and would assure biosecurity in that it would be located well within the barrier.

The planning and design of the Panama Production Facility would have to be completed well in advance of the eradication program in the southernmost countries of Central America and Panama to ensure the capability of efficiently producing sterile screwworm flies for the completion of the program.

Question: What would be the annual cost of maintaining a sterile fly barrier at Panama?

Answer: It would cost approximately $10 million a year to maintain a sterile fly barrier at Panama, for a savings of nearly $20 million per year.

Question: Are there other technologically sound locations to establish a screwworm barrier?

Answer: One technically sound location would be over Honduras and El Salvador which is the next land mass narrow enough to be an effective screwworm barrier.

Question: What would be the annual cost of barrier maintenance?

Answer: This barrier would cost approximately $25 million annually.

ANIMAL WELFARE

Question: Did Veterinary Services make as many inspections under the Animal Welfare Act in 1986 as in 1985?

Answer: No, in FY 1985 we made 18,213 inspections of licensees and registrants. This number of inspections helped us better identify potential problem areas and allowed us to prioritize future program activities. In FY 1986 we limited our inspections to the mandated annual inspection of all facilities and follow up inspections of those facilities with deficiencies, for a total of 16,370 inspections. However, we inspected 345 more dealers, exhibitors, and research facilities than last year.

ASIAN COCKROACH

Question: Recent newspaper articles indicate that a new species of cockroach, known as the Asian cockroach, is moving from an infested area in Florida to other areas of the country. A cooperative study between ARS and the University of Florida is underway to characterize the biology of the pest. To date, it has not been established that this roach does any damage to agriculture. If there are indications that this roach is an agricultural pest, what role do you anticipate for APHIS in helping ensure that the pest is eradicated before it inflicts serious economic damage?

Answer: As you mentioned, there is currently no indication that the Asian cockroach is an agricultural pest. If the results of current research indicate otherwise, APHIS would seek to determine the extent of the threat; what, if any, control or regulatory measures are warranted; and, finally, the cost in relation to benefits of such measures in light of other Agency priorities.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

Mr. Chairman, thank you for allowing me a few minutes for questions related to the administration and spending of agencies under the Marketing and Inspection Services.

First, I would like to address Mr. Bert Hawkins to thank him and his staff for the efforts they have made in the past year to coordinate and lead the efforts to control grasshopper and Mormon crickets. I know that much of his own personal time and efforts went toward making this program run smoothly and in concert with the intent of legislation passed in the 1985 Food Security Act. Farmers in Idaho felt that the coordination efforts and cooperation of Federal agencies improved dramatically. I am sure that it is because of APHIS' efforts lead by Mr. Hawkins.

In addition, the novel approach to initiate an integrated pest management trial and research on improved methods of treating rangeland grasshopper outbreaks at lower levels and reducing the need for massive amounts of Federal outlays in the future. I appreciate Mr. Hawkins' efforts and the efforts of his staff in spearheading this effort and coordinating with Agricultural Research Service, the Forest Service, the Environmental Protection Agency, the Bureau of Land Management, the Fish and Wildlife Service, and the National Park Service. I have recently been briefed by APHIS on the progress of this effort and commend and encourage these agencies and departments to continue their efforts to find better ways of managing this pest.

I am also happy to have been informed that Idaho may soon reach a milestone in its efforts to eradicate brucellosis. I was informed that this year Idaho herds could all reach Class A status. I offer my support for this vital program and urge cooperation with State officials and local farmers and ranchers to make this happen in 1987 in Idaho.

I am pleased at the efforts APHIS has made to see the successful transfer of the Animal Damage Control program from the Fish and Wildlife Service to APHIS. Many farmers in Idaho have expressed their delight at the efforts of APHIS personnel and the excellent job they have done over the past year. I am concerned however, at the continued request for a reduction in funding for ADC. It is necessary to maintain full funding for this program, in light of the fact that animal predation costs American farmers millions of dollars in lost profits. I urge the subcommittee to maintain full funding for these vital programs in FY 1988.

ANIMAL DAMAGE CONTROL

Question: In the FY 1987 funding, appropriations were specifically set out for funding of a guarding dog program, one involving Oregon and Washington and one involving Idaho and Wyoming. Could you please inform me of the progress of this program and identify the specific expenditures made thus far. I encourage APHIS to complete this program as stated in the reports surrounding last year's appropriation and, if changes are need, to work with this Subcommittee on these changes during this upcoming months.

Answer: We have developed a general plan for the integration of guard dogs with other methods of protecting livestock from predators. The plan calls for expanding the guard dog program in Oregon to include Washington and initiating a new program in Idaho and Wyoming. No expenditures have been made thus far. We are currently working out the details to implement the program with other USDA agencies and the States and industry involved. We hope to begin work shortly. We will comply with the Congressional directives on this subject and keep the Subcommittee apprised of our activities.

GRASSHOPPER

I am very concerned with the Administration's request for reduced funding for the 1988 grasshopper programs. Farmers and ranchers whose private lands border Federal grasslands and rangelands need to know in advance that the Federal government has the funds to operate an effective program. I hope that by 1988, the research this Committee funded on grasshopper control research will have paid dividends and the Federal land management agencies will have been able to divert or control outbreaks before they endanger private lands and crops. However, I am not as optimistic as some and prefer the comfort of some adequate levels of Federal funds specifically for the control of grasshoppers and Mormon crickets. The grasshopper control fund should maintain the $6.8 million in funding until such time as the Subcommittee decides that, based upon field reports, less funding will be necessary.

Question: Please supply me with the fall adult grasshopper surveys and, when available, the spring surveys.

Answer: The fall survey data are shown in the table below. As soon as the spring survey results become available, we will forward them to you directly.

[The information follows:]

Fall 1986 Grasshopper Survey
Estimates of Economically Infested Acres - 1987

	STATE/PRIVATE	FEDERAL	TOTAL
Arizona	127,000	985,000	1,112,000
California	152,800	0	152,800
Colorado	5,029,021	464,236	5,493,257
Idaho	93,820	216,580	310,400
Kansas	166,400	1,920	168,320
Montana	9,993,000	5,107,000	15,100,000
Nebraska	6,660,300	50,960	6,711,260
New Mexico	2,051,948	306,320	2,358,268
Nevada	8,855	18,767	27,622
North Dakota	382,310	175,050	557,360
Oklahoma	2,099,500	0	2,099,500
Oregon	733,500	326,500	1,060,000
South Dakota	515,360	57,040	572,400
Texas	13,969,214	85,263	14,054,477
Utah	203,420	190,340	393,760
Washington	295,080	152,100	447,180
Wyoming	3,401,010	544,700	3,945,710
TOTAL	45,882,538	8,681,776	54,564,314

NOXIOUS WEEDS

Noxious weeds is another area which concerns me. Control efforts have been stifled by law suits and inadequate worse case analysis by Federal agencies for noxious weeds on Federal lands. I urge you to reconsider the funding request for noxious weed control as this problem has only been growing worse over the past several years. In many cases, APHIS noxious weed control funds have been the only funds available for controlling weeds that would otherwise have spread to levels which would eventually lead to massive Federal expenditures.

Question: Please provide for me a listing of all noxious weed programs funded by APHIS appropriations and the level of funding.

Answer: We would be pleased to provide that information for the record.

[The information follows:]

APHIS Participation in Projects to Combat
Federally-designated Noxious Weeds
FY 1987

Appropriation: Noxious weeds

Project	State	Amount
Hydrilla	California	$100,000
Salsola vermiculata	California	5,000
Hydrilla	Florida	60,000
Common crupina	Idaho	125,000
Goatsrue	Utah	175,000
Orobanche ramosa	Texas	70,000
Port activities	numerous	112,000
Appropriation: Biological Control		
Hydrilla	California	140,000

QUESTIONS SUBMITTED BY SENATOR DECONCINI

ARIZONA BOLL WEEVIL PROGRAM EXPANSION

Question: Assuming a 70/30 producer/Federal funds cost/share and a 3-year program, what level of funding would be required to operate an effective, expanded boll weevil eradication program in Arizona?

Answer: We estimate a Federal cost of an expanded program to be $7,912,000 over 3 years, with an additional year of Federal involvement in follow-up work. Program activities would include surveillance of eradicated areas, conducting spot treatments to eliminate isolated infestations, and generally, taking whatever steps are necessary to protect the gains of the eradication program. Federal cost for the additional year would be $1,916,000.

Question: Based on current information and the experience gained in the Southeastern program, does APHIS believe an expanded eradication program can be effective in Arizona? (Environmental benefits, cost/benefits to growers, etc.)

Answer: From an economic standpoint, eradication of the pest from all of Arizona would translate into significant cost savings to cotton growers. In the Southeast program, one study showed that lint yields increased by 50 to 55 pounds per acre in the eradicated areas of North Carolina, with a reduction of $28 per year in production costs. From an environmental perspective, a successful program would reduce the amount of pesticides which growers would need to apply.

Question: What special considerations must be given in conducting an expanded program in Arizona? (Northern Mexico, urban population centers, Indian reservations, etc.)

Answer: For northern Mexico, there is a small area on the Arizona border that could be planted in cotton. To guard against reinfestation from this area, we would have to work out some arrangement with the Mexican Government to ensure control of this land. For Indian reservations, we need to put in place a mechanism to ensure an adequate host-free period. Finally, when treating in urban areas, we would need to take every possible precaution when applying pesticides.

Question: If Federal funding could be made available and grower assessments authorized, is APHIS capable of initiating an expanded program in Arizona beginning in 1988?

Answer: Yes, under those conditions APHIS could begin the program in FY 1988.

QUESTIONS SUBMITTED BY SENATOR HATFIELD

GYPSY MOTH

In each of the past two years, the Animal and Plant Health Inspection Service (APHIS) of the United States Department of Agriculture has assisted the State of Oregon with the State's effort to eradicate the gypsy moth from its forests.

Question: What level of funding was provided by USDA for this purpose and how was the money utilized by the State?

Answer: In Fiscal Year 1985 the U.S. Department of Agriculture provided $6,241,556 to assist the State of Oregon in eradicating the isolated infestation in Lane and Douglas counties. In Fiscal Year 1986, $4,435,900 was provided to continue this effort. These funds were used to carry out eradication treatments and survey activities.

Question: How many acres of Federal, State, and private lands were sprayed in FY 1985 and FY 1986? What are your projections for FY 1987?

Answer: We will be happy to provide that information for the record.

[The information follows:]

Oregon Gypsy Moth Eradication Program
Breakdown of Acres Treated by Ownership Category
for Fiscal Years 1985, 1986, and 1987

	1985 (actual)	1986 (actual)	1987 (proposed by State)
Private/State	160,970	172,082	11,870
Federal	66,030	21,820	200
	227,000	193,902	12,070

Question: What was the Federal Government's funding formula for the spraying of Federal lands? For State and private lands?

Answer: Federal funds were provided on a cost-share basis with the USDA covering 100 percent of the treatment costs on Federal land, and 50 percent of the treatment costs on State and private land.

Question: In Fiscal Year 1986, USDA utilized existing authority to reprogram funds to reach the Federal costs of the spraying program. Is this authority still available? Has it been considered for FY 1987? If not, why?

Answer: In Fiscal Year 1986, the USDA transferred $4,435,900 from the Forest Service to APHIS for gypsy moth eradication in Oregon. The USDA still retains the authority to reprogram funds in this manner. Because eradication treatments for the past 2 years have significantly reduced the infestation in Oregon, APHIS believes that the State should be able to complete the eradication program without additional Federal funds.

Question: Has the initial spraying program been successful? What criteria is used to measure the success?

Answer: Comparing current year trapping results with past years' trapping records provides us with the means to measure the success of this eradication program. Trapping results indicate that the eradication program has been very successful. Following 2 years of multiple applications of *Bacillus thuringiensis*, only isolated patches of the original 227,000 acre infestation remain. In 1986, only 17 moths were trapped within the treated areas out of a total of 109 captured within the regulated area. Over 19,000 moths were trapped in 1984 and 1,278 in 1985.

Question: What has the State of Oregon requested for the coming year?

Answer: For the eradication program in Lane and Douglas Counties, the State of Oregon has requested that APHIS provide $411,104 for eradication treatments and $179,598 for survey activities based on the cost-sharing formula used in Fiscal Years 1985-86 for this program.

Question: What portion of the costs has APHIS agreed to fund? If that funding formula differs from previous years, why has APHIS changed its position?

Answer: Because eradication treatments for the past 2 years have significantly reduced the infestation in Oregon, APHIS believes that the State should be able to complete the eradication program without additional Federal funds. APHIS will provide $41,320 in support of Oregon's statewide detection program.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

BUDGET REFORM

Calls for budget reform are increasingly heard as budget deadlines are too often missed, important budget decisions are delayed, appropriation bills and other direct spending legislation are held up in committee, and omnibus spending bills take the place of timely and orderly consideration of individual bills. One procedural reform that is being considered is the 2-year budget cycle where budget and appropriations matters would be considered in the first year, and authorizations and oversight would be undertaken in the second year.

Question: Would your department/agency favor a biennial budget process?

Answer: In general we do not oppose the concept and can see some advantages. From an APHIS perspective, our main concern would be with the ability of the process to maintain reasonable flexibility to deal with changing pest and disease situations. An inflexible 2-year budget could restrict our ability to place resources where they are most needed. Also, we would be concerned with how such a process would handle our continuing problem of funding emergency programs.

Question: What benefits would your agency achieve in a 2-year appropriation cycle?

Answer: The greatest benefit would be the opportunity to better plan our work if this process would prevent the recent last-minute funding decisions. It is very difficult to make sound plans for a fiscal year when funding remains uncertain after the year begins.

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: From any one year to the next, much of our budget request is repetitious. However, pest and disease situations can change overnight or over a period of years. For example, we expect that in a few years our request for the brucellosis program will drop dramatically after several years of relatively constant funding. The Agency's regulatory and surveillance programs are relatively constant, although for FY 1988 we are requesting increased funding for major initiatives in the agricultural quarantine inspection program. It would be accurate to say that the regulatory and surveillance programs, which amount to 42.5 percent of the FY 1988 budget, would constitute those most closely fitting the description of repetitious.

Question: What difficulties can you foresee in preparing and submitting a 2-year budget to the Congress?

Answer: The major difficulty would be in planning for dynamic pest and disease situations. Even in a 1-year appropriations process, program activities are projected for a period beginning in 18 months based on current situations. Moving the opportunities to make budget adjustments further back could exacerbate the problem of living with line item allocations which no longer properly reflect needs. Also, it seems that funding could become very tight for all USDA agencies during the second year of the cycle, severely limiting the Secretary's ability to transfer funds for critical emergencies such as the recent avian influenza or citrus canker problems.

Question: If you oppose the biennial budget concept, please give this Subcommittee your reason why.

Answer: While we would not necessarily oppose the biennial budget concept, we would want to see some provisions for the problems we have noted.

Background

On January 29, 1987, Senators Roth, Domenici, and others introduced S. 416, the Federal Budget Reform Act of 1987, that would institute a 2-year Federal budget cycle. The bill has been jointly referred to the Senate Committees on the Budget and Governmental Affairs.

AGRICULTURAL COOPERATIVE SERVICE

QUESTIONS SUBMITTED BY SENATOR BURDICK

CHANGES IN COOPERATIVE ORGANIZATION

In your testimony, you indicate that the number of mergers, consolidations, and dissolutions among farm cooperatives is reflected in the decrease of 157 cooperatively-owned businesses from 1984 to 1985.

Question: Could you please provide the subcommittee with a historic record of the past five years that shows the total number of cooperatives, the number of cooperative business failures, and the number of forced mergers?

Answer: The 1986 information is not yet available. The 1981-1985 data is as follows:

Year	Total number of cooperatives	Business Failures a/	Mergers b/
1981	6,211	70	40
1982	6,125	42	54
1983	5,989	84	55
1984	5,782	47	39
1985	5,625	96	46

a/ Reflects the number of cooperatives that had gone out of business and were removed from the ACS list of cooperatives. It is not known if all these cooperatives went out of business because of failure. The year-to-year variation is partly due to the information cooperative leaders and others provide ACS to maintain a list of farmer cooperatives.

b/ This includes consolidations. It is not known how many of these were forced mergers or consolidations.

Question: Please identify these cooperatives by type, such as whether they provide marketing, supply or other services.

Answer: Over the past 5 years (1981-85) more marketing cooperatives have gone out of business or merged than farm supply cooperatives. The following table identifies cooperatives by type.

Number of farmer cooperatives removed from ACS list, by function, 1981-85 a/

Mkt = marketing cooperative
FS = farm supply cooperative
Ser = related service cooperative

Year	Reasons for Removal						Total marketing, farm supply, and related service cooperatives Total			
	Out of business			Merger or consolidation b/						
	Function									
	Mkt	FS	Ser	Mkt	FS	Ser	Mkt	FS	Ser	Total
1981	60	10	0	22	22	0	82	32	0	114
1982	16	25	1	30	23	1	46	48	2	96
1983	49	31	4	40	15	0	89	46	4	139
1984	32	12	3	21	18	0	53	30	3	86
1985	73	18	5	31	14	1	104	32	6	142
	230	96	13	144	92	2	374	188	15	577

a/ In most cases, the actual dissolution, or consolidation may have occurred a year or more earlier than when the cooperative was removed from the ACS list. The year-to-year variation is partly due to the information cooperative leaders and others provide ACS to maintain a list of farmer cooperatives.

b/ Information is not available on how many of these cooperatives were forced to merge.

Question: Please also provide, on a table, the range in membership of existing cooperatives.

Answer: The range in membership of existing cooperative follows:

Farmer Cooperatives Classified by Type, and Range of Memberships, FY 1985

Type	Range of membership			Total
	0 to 550	551 to 2,300	2,301 and above	
	Number of Cooperatives			
Cotton	399	12	6	417
Dairy	345	26	12	383
Fruit & Vegetable	316	23	4	343
Grain	1,058	513	52	1,623
Livestock	274	20	19	313
Nuts	10	1	5	16
Poultry	17	0	1	18
Tobacco	9	15	8	32
Wool	136	17	2	155
Dry Beans	8	3	0	11
Rice	26	4	21	51
Sugar	31	7	0	38

Misc. Mkt.	36	5	0	41
Farm Supply	912	741	383	2,036
Related Services	132	8	8	148
Total	3,709	1,395	521	5,625

Note: Federations are included with size of membership equal to one. A true federation has no direct memberships by farmers. Results of the 1985 survey of farmer cooperatives showed 5,625 cooperatives with 4,781,216 memberships. These membership figures contain duplication because many farmers belong to more than one cooperative.

COOPERATIVE RESEARCH

Question: In recent years, the Agricultural Cooperative Service has engaged in a wide variety of research projects of interest to cooperatives. How does the Agency determine what topics to pursue as research projects?

Answer: The Agency annually updates its 3-year research planning agenda. This represents ACS staff input in identifying priority topics and issues requiring research. In addition, the agency has had periodic outside program reviews. These review teams have been very helpful in identifying priorities as seen by the cooperative community.

Several years ago, the Agency was actively involved in establishing the North Central Research Committee #140 - "Research on Cooperatives." This provides a regular forum for interaction with land-grant university researchers on cooperatives and helps to further determine priorities as well as areas of mutual research interest. The technical assistance work carried out by the Agency, while often shorter term in nature, frequently has results that are widely applicable. They focus on the most urgent needs of cooperatives. Given the dynamic nature of the food industry, we constantly monitor problems and priorities and shift resources as needed.

Question: Do the cooperatives consult with you in these determinations?

Answer: Yes, cooperatives are involved, often informally as just described. The Agency also maintains contacts with State cooperative councils, national trade associations, and general farm and commodity groups throughout the year. These contacts are especially helpful in determining cooperative policy issues requiring research.

COOPERATIVES IN FOREIGN MARKETING

Cooperatives are commonly viewed as advantageous to farm income. Through direct marketing, cooperatives are able to gain in our domestic marketplace. I notice that among the research accomplishments of the Agricultural Cooperative Service in 1986 was a study of the use of export management companies by cooperatives.

Question: Could you please tell the subcommittee how many of the 5,600 existing cooperatives are exporting directly; how many are exporting through intermediary organizations such as management companies or export trading companies?

Answer: In 1985 there were 87 cooperatives who exported agricultural products. Of these, 46 were direct exporters only and 5 were indirect (selling to domestically based export intermediaries) exporters only. The remaining 36 cooperatives used a combination of direct and indirect export methods.

The 1986 study on the use of export management companies by cooperatives referred to above was designed to provide guidance to cooperatives not now exporting on one way to enter export markets without the large risk sometimes associated with direct exports.

Question: Does the Agricultural Cooperative Service intend to provide technical assistance to cooperatives that may which to market directly with foreign countries?

Answer: Yes, we have done so in the past and will continue to do so for those who request assistance, providing the necessary resources are available.

Question: Have you conducted any work with the Foreign Agricultural Service to encourage cooperatives to engage in direct marketing abroad?

Answer: Yes, almost all technical assistance projects and most research projects include contact with FAS. ACS frequently uses FAS data and information to assist cooperatives, and we often encourage cooperatives to use FAS programs.

ACS BUDGET PROPOSAL

The Agricultural Cooperative Service budget proposal includes a decrease of $857,000 below its fiscal year 1987 level. Yet, despite an increase in salary and retirement costs, the number of staff years remains the same between fiscal years 1987 and 1988.

Question: How does your Agency intend to come up with the necessary savings to meet its budget request?

Answer: The Agency has significantly reduced personnel during the past 5 years. As a result we have conducted a part of our research program by the use of cooperative research agreements with various colleges and universities. This proposed budget reduction will mean the elimination of this program. In addition, technical assistance to new and existing cooperatives will be reduced.

Question: Will the Agricultural Cooperative Service shift the emphasis in the type of assistance it provides?

Answer: The type of assistance the Agency provides will not be significantly altered, however the amount and timeliness of the service may be altered to the extent resources are not available. We will continue to try to provide the best information possible on high priority requests.

Question: If your proposal to implement user fees for all services provided by the Agricultural Cooperative Service were adopted by Congress, how would your Agency go about assessing these charges?

Answer: This is a difficult question which we have given much thought. A schedule is being developed based on salary, expenses, and overhead costs associated with providing technical assistance services and research activities. While it is more difficult to devise a user fee plan for research than technical services, we are looking into such alternative possibilities as individual cooperative sponsorship of projects, group sponsorships, or funding through organizations or associations.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

Calls for budget reform are increasingly heard as budget deadlines are too often missed, important budget decisions are delayed, appropriation bills and other direct spending legislation are held up in committee, and omnibus spending bills take the place of timely and orderly consideration of individual bills. One procedural reform that is being considered is the 2-year budget cycle where budget and appropriations matters would be considered in the first year, and authorizations and oversight would be undertaken in the second year.

1a Question: Would your department/agency favor a biennial budget process?

Answer: The Agricultural Cooperative Service would favor a biennial budget process.

1b Question: What benefits would your agency achieve in a 2-year appropriation cycle?

Answer: There would be a significant savings in the preparation, submission and presentation process. It would permit a longer planning horizon.

2 Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: About 90 to 95 percent is repetitious.

3 Question: What difficulties can you foresee in preparing and submitting a 2-year budget to the Congress?

Answer: I can see no particular problem in preparing and submitting a 2-year Agency budget.

4 Question: If you oppose the biennial budget concept, please give this Subcommittee your reason why.

Answer: We do not oppose the concept.

Background

On January 29, 1987, Senators Roth, Domenici, and others introduced S. 416, the Federal Budget Reform Act of 1987, that would institute a 2-year Federal budget cycle. The bill has been jointly referred to the Senate Committees on the Budget and Governmental Affairs.

PACKERS AND STOCKYARDS ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR BURDICK

CENTRAL FILING SYSTEMS

Question: To date, what 10 states have certified central filing systems required by the Food Security Act to notify purchasers of farm products of liens on such products? Would you please provide a list of those States?

Answer: The 10 States are: Montana, Mississippi, Idaho, Utah, North Dakota, Oregon, Maine, Louisiana, Nebraska, and Arkansas.

Question: Have there been any problems in implementing this provision of the Food Security Act?

Answer: There have not been any significant problems arising in the implementation of Section 1324 of the Food Security Act of 1985 insofar as system certification of the States which have made application. As with any new system or program, however, the States are likely to experience some problems in the operations of the systems. It will probably be necessary for the systems to operate for sometime before determinations can be made as to needed changes, if any.

Question: Have other States shown an interest in setting up a central filing system?

Answer: There have been inquiries from several other States concerning establishing central filing systems. It would be difficult to estimate the number of other States that are seriously considering establishing central filing systems at this time.

Question: Why have they not yet done so?

Answer: There is no compulsion under the Federal statute for the State to set up such a system. User groups have strongly opposed such a move in many States. Cost is an important consideration in making such a determination.

Question: Since the December 31, 1986, deadline, have problems arisen for those States that do not have a filing system?

Answer: The Agency would not necessarily know of any problems arising in the States that do not have a central filing system; however, there has been no information received by the Agency indicating any significant problems.

Question: Are you aware of any difficulties where purchasers, sellers, and lenders may be from different States, where a filing system may be in place in one and not another?

Answer: The Agency is not aware of any such difficulties.

Question: Is there any pending litigation with respect to the clear title provision of which you are aware? If so, would you please provide the Subcommittee with the status of these claims?

Answer: The Agency is unaware of any such litigation or claims.

WEIGHING INVESTIGATIONS

Question: The Packers and Stockyards Administration discloses that during fiscal year 1986, of 353 formal weighing investigations, 46, or 13 percent reveal false or inaccurate weights. How does this figure compare to prior years?

Answer: The report on weighing investigations, 353 formal investigations with 46, or 13 percent, revealing false or inaccurate weights, was based on preliminary information. Final figures show that in fiscal year 1986, a total of 382 livestock wieghing investigations were conducted with 61, or 16 percent, revealing false or inaccurate weights. This compares to 23 percent of 287 investigations conducted in fiscal year 1985 revealing false or inaccurate weights; 27 percent of 248 investigations in fiscal year 1984; 23 percent of 395 investigations in fiscal year 1983; and 12 percent of 370 investigations in fiscal year 1982.

CIVIL PENALTIES

Question: Would you please provide the Subcommittee with a list of the civil penalties imposed by the Packers and Stockyards Administration during fiscal year 1987?

Answer: The following is a list of civil penalties imposed during fiscal year 1987 as of March 23, 1987.

Docket No.	Penalty Imposed
6591	$ 8,000
6610	500
6635	1,750
6650	1,000
6655	500
6659	8,000
6662	5,000
6682	12,000
6685	5,000
6703	10,000
6722	10,000
6742	500
6750	500
6761	350
6767	2,000
6802	1,000
6818	1,000
6820	7,500
6821	5,000

Question: For what offenses were these imposed?

Answer: Civil penalties are imposed for various violations of the Act, including payment and financial protection violations as well as unfair and deceptive trade practices. Any particular case may include several different types of offenses on several different occasions.

DRUG RESIDUES

Question: How is the Packers and Stockyards Administration working with other agencies to control the marketing of farm animals exhibiting residues of drugs?

Answer: The Agency works with the Food Safety and Inspection Service (FSIS) and the Food and Drug Administration (FDA) in controlling drug residues in farm animals. P&SA's role in this area is to provide investigative assistance to FSIS and FDA in reviewing selling agency, packer and dealer records and in tracing animals with violative residues back to their origin. P&SA has the authority to take formal action when false records are created to cover up the movement of drugged animals. Liaison between P&SA, FSIS and FDA has been established to avoid duplication of work and to provide for the exchange of information.

Question: Would you please provide information on the types of animals and drug residues that P&SA has helped to control?

Answer: Most of the drug residue work has involved the marketing of baby calves under the voluntary drug certification program initiated jointly by P&SA and FSIS. Neonycin and sulfa are the most prevalent violative drugs in this type of animal. P&SA also worked with FSIS and FDA in tracing dairy cows that received heptachlor in feed purchased in Arkansas. P&SA is also cooperating with FSIS and FDA in controlling violative drug residue levels in downer cows.

SCOPE OF OPERATIONS

Question: The value of the livestock, meat, and poultry subject to the Packers and Stockyards Act exceeds $58 billion each year. Could you please provide the Subcommittee with a breakdown of the dollar value of these products by type?

Answer: The $58 billion in livestock, meat and poultry subject to the P&S Act consists of $38 billion in Livestock, $8 billion in poultry and $12 billion market value added through slaughter, processing and wholesaling.

QUESTION SUBMITTED BY SENATOR SASSER

LIVESTOCK MARKETING

Question: Mr. Jones, I am disturbed by your reports that fraud and misrepresentation are creating significant problems in the area of livestock marketing. These instances of fraud and misrepresentation could be very costly and dangerous to the American public. I'm pleased to see that you are establishing improved surveillance programs to reduce these problems.

But, I am interested; just how prevalent are these problems, and why specifically within livestock marketing?

Answer: Fraudulent type practices do not occur exclusively in livestock marketing. Some fraudulent type practices also occur in meat marketing. During fiscal year 1986, P&SA conducted 188 investigations involving fraudulent type practices. These investigations disclosed 105 violations. The approximately 56 percent ratio of violations to investigations should not be considered indicative of the livestock marketing industry as a whole. In the interest of efficiency, every effort is made to concentrate investigations where there is reason to believe that there may be violations.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

CLEAR TITLE

Question: Could you provide for me a listing of all states which have chosen to use the Central Filing System? Have any further problems arisen in the implementation of this new UCC regulation?

Answer: As of March 1, 1987, the central filing systems of ten states had been certified. The states are: Montana, Mississippi, Idaho, Utah, North Dakota, Oregon, Maine, Louisiana, Nebraska, and Arkansas. There have not been any significant problems arising in the implementation of Section 1324 of the Food Security Act of 1985 insofar as system certification of the states which have made application. As with any new system or program, however, the states are likely to experience some problems in the operations of the systems. It will probably be necessary for the systems to operate for sometime before determinations can be made as to needed changes, if any.

Question: Is there a possibility that the central filing system could be computerized to the END USER--for instance a grain elevator?

Answer: It is possible. Some state systems do provide for computer access to the central filing system data, however, this does not provide any protection to the buyer.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

BIENNIAL BUDGET CYCLE

Question: Would your department/agency favor a biennial budget process? What benefits would your agency achieve in a two-year appropriation cycle?

Answer: The agency does not see any particular benefits in a two-year budget cycle as described in the proposal.

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: Only about 15 to 20 percent of the annual appropriation request could be considered repetitious.

Question: What difficulties can you foresee in preparing and submitting a two-year budget to the Congress?

Answer: The agency does not foresee any particular difficulties in preparing and submitting a two-year budget to the Congress.

Question: If you oppose the biennial budget concept, please give this subcommittee your reasons why.

Answer: At the present time, there is not sufficient convincing information available on the proposal indicating any particular advantage for the change, or that it would correct any of the problems now associated with the annual budget process. The problems generally associated with the budget are not those created by the process but rather in the implementation and the execution of the process.

OFFICE OF TRANSPORTATION

QUESTIONS SUBMITTED BY SENATOR BURDICK

SENATE DIRECTED STUDY

In the Fiscal Year 1987 appropriations report adopted by the Senate, the Office of Transportation was instructed to conduct a study of the tax gasoline contributions of rural areas and their correlation to Federal funds available for construction and maintenance of roads and bridges in rural communities. The deadline for this annual report is June 1, 1987. On December 3, 1986, I wrote to Secretary Lyng to inquire about the status of this report, but I have not yet received a reply to my letter.

Question: At this time, could you provide the subcommittee with a summary of the progress to date on this report and any of your preliminary findings?

Answer: The Office of Transportation has enlisted the cooperation of a number of agencies and organizations to complete the Senate directed study on financing rural road and bridge improvements. The study participants include, but are not limited to, the U.S. Department of Transportation's Office of the Secretary and its Federal Highway Administration, the U.S. Department of Agriculture's Economic Research Service, the National Association of Counties, and the National Association of Towns and Townships.

Secondary data on Highway Trust Fund obligations is being supplied by the U.S. Department of Transportation and analyzed to determine the amount of money flowing back to the nonmetropolitan jurisdictions. A procedure is being developed to estimate the Highway Trust Fund tax burden of the nonmetropolitan areas.

Information also is being collected from local and State government officials regarding the administration of the Federal highway and bridge programs and the alternative funding sources which are available at the Federal, State, and local levels for constructing and maintaining roads, streets, and bridges in the nonmetropolitan areas.

It is really too early in our study effort to relay findings. We do intend, however, to submit the report by June 1, 1987.

OT ELIMINATION

The President's Fiscal Year 1988 budget proposes to phase-out the Office of Transportation by September 30, 1988. This proposal is similar to one submitted to Congress in Fiscal Year 1987.

The Office of Transportation serves agricultural and rural areas of the United States by assuring that technical assistance relating to transport by rail and ship is available. The Office of Transportation plays an important role in improving farm income and expanding exports by representing agriculture in the transportation sector.

Question: If the Office of Transportation were eliminated, how could farmers and agricultural shippers be assured that they would be fairly represented in regulatory proceedings before the Interstate Commerce Commission?

Answer: There are numerous trade organizations that may represent specific segments of the agriculture community, but some Federal government involvement may be appropriate. Since small shippers and producers would be hurt, especially in today's deregulated environment, by not having a Federal agency that is familiar with their concerns represent them in transportation regulatory proceedings, this is one function that would receive a high priority in the Department's study for alternative locations for some OT activities. We believe the Department will make every effort to represent farmers and shippers before the ICC in some capacity.

The Office of Transportation has, in the past, contributed in negotiating reasonable rail transportation rates for farmers under emergency circumstances or when a shortage of refrigerated cars has existed.

Question: Could you please inform the subcommittee how you believe that in the future our farmers might expect to receive such assistance without the Office of Transportation?

Answer: The Department is looking into various options to provide some level of assistance to farmers. We will cooperate in that effort because it is important that our most vital services be provided in some manner.

TRANSFER OF FUNCTIONS

Question: If terminated, would other agencies in the Department of Agriculture be required to absorb activities currently performed by the Office of Transportation?

Answer: The essential activities of the agency would be retained. The Department has this matter under review but has not resolved the issues of just which activities are essential and which agency or agencies should absorb them.

Question: Would such a transfer of activities require additional staff years in other agencies?

Answer: Because some of the activities are unique, they could not be readily absorbed by other agencies without specialized personnel. The full extent of the additional staff years required in other agencies would depend on just which functions were retained.

STATE AND LOCAL FUNDING

Question: Without technical assistance from the Office of Transportation, could we expect that State and local governments would be able to meet the financing requirements for developing rural roads and bridges in the future?

Answer: The Office of Transportation has provided guidance to State and local governments on a range of issues affecting the financing of rural roads and bridges such as management and planning, and has often served as a linkage between the Federal, State, and local governments and the organizations which have programs in place to provide particular types of assistance to the State and local governments. However, States and local governments have the responsibility for securing funds for their road and bridge needs.

Concern about the linking of programs and assistance served as the basis for a recommendation developed by representatives of local government, public works, agriculture, mail delivery, safety, and university interests at a National Symposium on Local Roads in 1986. The consensus of opinion was that a national local roads forum is needed for collecting and dispersing basic data on local road conditions, supporting local road research, recommending local road research needs, providing public information, and maintaining a linkage between the local road interests. At this time, the Office of Transportation provides some of these services but does so on a somewhat limited basis. We hope that the States and local governments would pick up this work in some fashion.

Question: Is there currently expertise at the local level to assure immediate technical assistance to rural communities throughout the country?

Answer: The expertise available at the local level to assist rural communities is not uniformly distributed. Assistance is provided by Extension Service (ES) specialists at the State, regional, or county levels and by the technology transfer centers that are supported by the U.S. Department of Transportation. The ES has few transportation specialists nationwide and assistance is often provided by those specializing in marketing or community development. The technology transfer centers currently are located in 42 States and each is responsible for serving officials responsible for rural transportation matters in a State with some centers even serving more than one. Because of this and the need for a broad range of assistance, some communities are investigating ways in which they themselves can have access to such assistance on a more routine, local basis.

One local approach is the modern day circuit rider which is supported by intergovernmental agreements that facilitate cooperation between the communities. This approach is being used in New York State by rural communities in the Tug Hill region for assistance in managing their own resources. Technical assistance and organizational support represent about 75 percent of the effort and includes community planning assistance, problem solving and training of local officials, community organization and contact, citizen education, and development of new ideas to aid local government and the local economy.

Question: Has the Office of Transportation estimated the amount of funds that will be required at the State and local level to meet optimal rural transportation needs?

Answer: During the past few years, the Office of Transportation (OT) has focused research efforts on the adequacy of the rural road system to meet the needs of agriculture, other rural businesses, and rural residents since much of the rural economy is now dependent upon the availability of truck transportation. One of the major issues affecting the adequacy question is financing. Since almost two-thirds of the rural road system is under local government control, OT has devoted considerable resources to gathering and developing information about the level of funding that would be required to bring the rural road system that is under local government control to adequate or acceptable service levels.

The results of a multi-State study conducted by OT in cooperation with Western Illinois University and the University of Illinois of the rural roads under township control in Illinois, Minnesota, Ohio, and Wisconsin are reported in Financing Rural Roads and Bridges in the Midwest. Estimates of the cost to bring roads and bridges to acceptable conditions as defined by the township officials during this study are presented in the following table. Townships in these States maintain about two-thirds of the local rural road mileage. Currently, we are expanding our knowledge about the local situation in the four States by gathering information about the local rural roads and bridges that are under county control. Counties in these States are responsible for the other third of the mileage. Although the local responsibility in these States is shared by county and township governments, the distribution of local road responsibilities between townships and counties varies among these States. Preliminary estimates of the county needs also are presented in the following table. The county costs are based upon bringing the roads and bridges to the national service standards established by the American Association of State Highways and Transportation Officials (AASHTO), which may exceed those considered acceptable by the township officials.

The information presented shows that the costs of bringing rural roads and bridges to acceptable levels are great and indeed are well beyond the current fiscal capacity of most rural governments. The challenge will be to find ways to maintain a sound investment and an adequately performing rural transportation infrastructure that can serve the transportation needs of agriculture, the rural economies, and the nation.

[The information follows:]

Estimated Costs of Upgrading Rural Roads and Bridges Under Township and County Control in Illinois, Minnesota, Ohio and Wisconsin

(m = Millions)

Cost Category	Illinois	Minnesota	Ohio	Wisconsin
Rural Roads:				
Township Roads1/				
Average Cost Per Mile	$ 7,271	$ 4,448	$ 13,752	$ 8,525
Road Mileage	68,585	55,226	34,847	59,640
Total Township Road Cost	$498.7 m	$245.6 m	$479.2 m	$508.4 m
County Roads2/				
Average Cost Per Mile	$112,360	$ 95,238	$ 38,440	$ 36,532
Road Mileage	15,050	43,657	27,196	19,445
Total County Road Cost	$1,691.0m	$4,157.8m	$1,045.4	$710.4 m
Total Rural Road Costs	$2,189.7m	$4,403.4m	$1,524.6m	$1,218.8m
Rural Bridges:				
Township Bridges1/				
Average Cost Per Bridge	$ 35,045	$ 23,280	$ 18,456	$ 25,864
Number of Bridges	11,739	6,006	7,604	4,591
Total Twn'p Bridge Cost	$411.4 m	$139.8 m	$140.3 m	$118.7 m
County Bridges2/				
Average Cost Per Bridge	$117,120	$ 82,767	$ 73,686	$ 95,482
Number of Bridges	3,831	13,523	2,909	18,440
Total County Bridge Cost	$448.7 m	$ 1,119.3m	$214.4 m	$1,760.7 m
Total Rural Bridge Costs	$860.1 m	$ 1,259.1m	$354.7 m	$1,879.4 m
Total Road & Bridge Costs:	$3,049.8 m	$ 5,662.5m	$1,879.3 m	$3,098.2 m

1/ Cost estimates are based upon information collected in 1984 and reported in Financing Rural Roads and Bridges in the Midwest (published by the U.S. Department of Agriculture in October 1984)

2/ Preliminary cost estimates based upon information collected in 1986 which will be published in 1987 by the U.S. Department of Agriculture's Office of Transportation

ICC PROCEEDINGS

Question: Would you please explain in what proceedings before the ICC, that the Office of Transportation has represented the agricultural sector during the last fiscal year?

Answer: Following are proceedings before the ICC during 1986 in which OT represented the agricultural sector:

[The information follows:]

ICC 38904 - Elimination of Truck Accounting Requirements

- Filed comments requesting retention of certain motor carrier accounting records to allow carriers and shippers to make transportation decisions.

Ex Parte No. 462 - Exemption of Demurrage Charges

- Filed comments requesting continued regulation of demurrage (car detention) rules and charges to prevent undue discrimination against smaller shippers.

Ex Parte No. MC-178 - Motor Carrier Insurance Rates

- Filed comments suggesting alternatives for resolving the carrier insurance crisis.

Ex Parte No. 387 - Rail Transportation Contracts

- Filed comments primarily in support of new rules for contract disclosure allowing "affected" shippers to discover the terms of secret contracts.

Ex Parte No. 290 (Sub 2) - Quarterly Rail Rate Adjustment Procedures

- Filed comments suggesting new procedures for quarterly rail rate adjustments that would allow downward adjustment in rates when rail costs decline.

F.D. No. 30400 - Santa Fe-Southern Pacific Merger

- Filed a reply to the SFSP petition to the ICC requesting reopening the proceedings to consider new evidence.

EXPORT ENHANCEMENT

The Office of Transportation has been involved in evaluating the foreign port capacity for handling grain.

Question: Would you please tell the subcommittee about your most recent activities in examining new technologies for eliminating foreign port bottlenecks and explain how such technologies may help save U.S. Government funds.

Answer: Over the past year we have been involved in a number of foreign port studies to help reduce total distribution costs to foreign buyers and, in cases where PL-480 shipments are involved, to USDA. All have been at the request of the Foreign Agricultural Service. Some involved the implementation of new technologies like port-side vessel storage and transfer systems or "laminar flow" grain handling equipment, but most recommendations involve improvements that are "off the shelf" varieties of the efficient grain handling system we currently use in this country. Specific information follows by country.

[The information follows:]

Honduras: An examination of Puerto Cortes found that increasing the storage capacity to 20,000 tons could be paid for in 5 years with savings primarily accruing from a reduction in ocean freight rates. A $200,000 reduction in ocean freight differentials paid by USDA was estimated if the $5 million facility is built. A facility design accompanied the feasibility study.
(February 1986)

Guatemala: An overview of the importing grain handling system found that the Atlantic port of Santo Tomas has reached capacity and recommended that Puerto Quetzal on the Pacific coast should be developed to accommodate at least the handling of imported grain. It has a deeper draft and is closer to storage, processing and consumption points. A feasibility study is to be undertaken in May that will assess the cost of needed discharge and storage improvements against the benefits that should accrue to both sellers and buyers.
(May 1986)

Ecuador: A study team was requested to determine if Guayaquil could receive substantially larger amounts of U.S. wheat exports. After examining the port and inland grain distribution system, two options were presented: (1) vessels could be unloaded at Guayaquil and the grain barged to local mills or (2) vessels could themselves reach local mills on the river system if partially unloaded at the port. (October 1986)

Haiti, Jamaica, and the Dominican Republic: OT personnel are presently engaged in defining a program of work to remove transportation constraints to expansion of U.S. agricultural exports in these three countries. (March 1987)

Eliminating port bottlenecks may reduce U.S. Government expenditures by decreasing the amount paid by USDA (and DOT) in ocean freight differentials that cover the higher rates charged by U.S. flagships. The rate any ship charges includes the time it takes to unload in a foreign port and is directly related to the size of ship employed. Port or inland distribution system improvements designed to increase the size of vessel that may be accommodated and increase the unloading rate translate into lower freight costs and lower expenditures by USDA, not to mention the benefits to importers of lower foreign- and U.S.-flag freight charges.

PL-480 recipient countries generally receive this assistance. Financing the needed construction or equipment improvements is a problem as these countries often can not afford the recommended improvements.

Question: To what extent does the Office of Transportation work with the Foreign Agricultural Service to provide technical assistance to U.S. exporters and to negotiate reasonable rates for rail and ocean transportation?

Answer: Just over a year ago the Office of Transportation created an International Division which works closely with FAS in promoting agricultural exports. We currently are working with the FAS in the following areas:

> Dairy Herd Termination Program, as a member of the FAS task force to provide transportation assistance for live cattle and frozen beef shipments;
>
> Export Enhancement Program, by determining transportation costs to foreign markets for U.S. exporters and comparable costs by foreign competitors so FAS may develop accurate incentive payments to U.S. exporters;
>
> Targeted Export Assistance, through a study of recipient TEA commodity groups to determine the nature and degree of any transportation constraints which might limit our ability to competitively place our product overseas; and the
>
> Agricultural Information and Marketing Service, an FAS-operated, electronic link between foreign markets and U.S. suppliers, by mailing each potential exporter information on the technical assistance available from OT personnel.

Many individual agricultural exporters call or write for information on how to move products to markets most efficiently. OT personnel provide answers to problems involving both product quality and available transport services and rates to foreign markets over various modes and transport arrangements. The problems range from how best to accommodate Illinois baby pigs on their way to China to locating air container services for a New York table grape grower trying to sell in the U.K. market.

Entering into individual negotiations for shippers would be impossible given our resources and certainly not as effective. OT does endeavor to provide as much information as possible to the shipper about their transport options so the shipper may negotiate from the strongest position possible.

QUESTION SUBMITTED BY SENATOR SASSER

Mr. Fitzpatrick, you have stated that you wish to phase out the Department of Agriculture's Office of Transportation during Fiscal Year 1988. I commend you for making this sacrifice in an attempt to help the government reduce the Federal deficit.

However, I am concerned about some of the statements you have made here today, especially that rail abandonments continue to threaten rural America. With the significant problems already facing farmers, I want to be sure that the elimination of the Office of Transportation will not add another burden to rural America.

Question: Do you believe that transportation needs can be adequately met in rural America without the assistance of the Office of Transportation?

Answer: Without OT, we hope that many of the problems facing farmers, other rural producers, the rural residents, and the rural communities would continue to be addressed by perhaps other Federal agencies, State agencies, and university researchers and educators. What could be lost without a substitute for some OT functions is the ability to integrate and investigate the issues and problems on regional or national bases, to document the extent of the problem as it relates to national goals, and to find workable solutions involving the Federal, State, and local governments. We must avoid a piecemeal approach that would provide less focus on agriculture and rural communities than is needed.

In regard to the specific concern about rail line abandonments, certain information and assistance on abandonments is available from the Interstate Commerce Commission. Also, some State agencies are active in maintaining rail service in their jurisdictions. Additionally, a few studies have been made by the private sector describing short line railroads and their operating characteristics.

QUESTION SUBMITTED BY SENATOR COCHRAN

Question: If Congress goes along with the President's requests and agrees to the elimination of the Office of Transportation, who will assume responsibility for your present activities?

Answer: The Department is currently studying which present OT activities are essential and then later will decide which agency or combination of agencies shall assume these functions.

QUESTION SUBMITTED BY SENATOR MCCLURE

Question: One final question is directed to the Office of Transportation Administrator, Mr. Martin Fitzpatrick. I have had many complaints in the past year concerning the setting of rates by the Transpacific Westbound Rate Agreement. Are you currently undertaking any research or investigation of this organization and its effects on US exports in the Pacific Rim countries? If not, how much funding would be necessary to facilitate a comprehensive study and report on the TWRA?

Answer: The Shipping Act of 1984 allows carriers to discuss, fix, and regulate transportation rates. The Act also allows for larger-sized conferences which, in a number of cases, have proposed and enacted substantial rate increases for exported agricultural products. While agricultural shippers are concerned about the level of these increases, they find the volatility of rates to be more of a disadvantage in selling to overseas customers. The Office of Transportation has received a number of complaints from onion, hay, cotton and lumber exporters and their associated organizations about one conference in particular, the Transpacific Westbound Rate Agreement.

On August 29, 1986 the Federal Maritime Commission ordered the TWRA to pay a $300,000 penalty in an agreement with the conference after a lengthy investigation involving anticompetitive abuses of the Shipping Act. No guilt was implied by the finding, but the TWRA was cautioned to restrain from implementing several actions that could have been detrimental to U.S.shippers.

The Office of Transportation (OT) is requesting agricultural exporters to express their opinion and provide information concerning liner conferences and the impact of the new Shipping Act on their businesses through a survey the Federal Maritime Commission is currently conducting. This data and information will provide Congress and the public with material to assess the effectiveness of the Act in balancing shipper, carrier, port and other interests for the congressionally-mandated 5-year review.

In order to ensure agricultural interests receive adequate review of their criticism of either the TWRA or the Shipping Act itself, OT is contacting several agricultural organizations to determine if the FMC review is enough or should USDA conduct a complementary study of its own. Certainly the question of the volatility of conference rates and their affect on maintaining or enhancing our overseas sales appears to be one question the FMC may not approach but USDA could. In order to investigate fully agriculture's concerns, more input is being sought on what specifically should be looked at during the conduct of the study. A reasonable estimate of such an undertaking would be $50,000 given the scarcity of hard data on ocean freight rates and the necessity to accomplish what could have far-reaching and costly ramifications.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

Question: Would your agency favor a biennial budget process?

Answer: Yes. Benefits would include cost reductions in the form of fewer resources allocated to the budget development process, and better continuity of programs that require a time duration for completion extending beyond the annual budget cycle. The biennial budget would also allow for improved management control of agency expenditures.

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: While the emphasis changes somewhat year-to-year insofar as specific problems encountered are concerned, the overall program does not experience dramatic annual changes. Agency goals and budgets have remained fairly stable for several years.

Question: What difficulties can you forsee in preparing and submitting a 2-year budget to the Congress?

Answer: No major difficulties would be anticipated in preparing a 2-year budget to the Congress.

Question: If you oppose the biennial budget concept, please give this Subcommittee your reason why.

Answer: This agency does not oppose the concept.

SUBCOMMITTEE RECESS

Senator BURDICK. This concludes today's hearing. Our next hearing will be held Wednesday, March 4, at 10 a.m., in this same room. At that time, we will hear from representatives of the Extension Service, the Economic Research Service, and the National Agricultural Statistics Service.

Thank you, gentlemen, for appearing today. A recess is now declared.

[Whereupon, at 3:35 p.m., Monday, March 2, the subcommittee was recessed, to reconvene Wednesday, March 4.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

WEDNESDAY, MARCH 4, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Sasser, Harkin, Cochran, and Grassley.

DEPARTMENT OF AGRICULTURE

STATEMENT OF ORVILLE G. BENTLEY, ASSISTANT SECRETARY, SCIENCE AND EDUCATION

ACCOMPANIED BY:
EWEN WILSON, ACTING ASSISTANT SECRETARY, OFFICE OF ECONOMICS
ROBERT SHERMAN, DEPUTY BUDGET OFFICER

EXTENSION SERVICE

STATEMENT OF MYRON D. JOHNSRUD, ADMINISTRATOR

ACCOMPANIED BY:
DENZIL O. CLEGG, ASSOCIATE ADMINISTRATOR
RICHARD R. RANKIN, DEPUTY ADMINISTRATOR, MANAGEMENT

OPENING REMARKS

Senator BURDICK. The subcommittee will come to order.

Good morning, ladies and gentlemen. Today, we continue with our hearings on the President's proposed fiscal year 1988 budget for the Department of Agriculture. We will review recommendations submitted by the Extension Service, the Economic Research Service, and the National Agricultural Statistics Service.

Joining us today are Assistant Secretary for Science and Education, Orville Bentley; Acting Assistant Secretary for Economics, Ewen Wilson; Administrator of the Extension Service, Myron Johnsrud; Administrator of the Economic Research Service, John Lee; and Administrator of the National Agricultural Statistics Service, William Kibler. Accompanying these gentlemen is Bob Sherman of the Office of Budget and Program Analysis at USDA.

The fiscal year 1988 budget recommendations submitted to Congress offer encouragement to cooperative extension programs that receive about one-third of their funds from the federal government. These formula grants, provided under section 3(b) and (c) of the Smith-Lever Act, are given a high priority in the President's budget. An increase of $7.8 million is proposed to the $229 million provided in fiscal year 1987.

Other areas recommended for increases above the fiscal year 1987 levels are the District of Columbia extension program and the 1890 Colleges and Tuskegee University.

The overall Extension Service, however, would incur a reduction of $69.3 million according to the President's fiscal year 1988 budget. While not as drastic as the 60-percent reduction proposed in fiscal year 1987, this year's recommendations include the termination of all earmarked funds allocated to states for special programs, including food and nutrition education, pest management, farm safety, financial management, renewable resources extension, and section 1440 grants.

Today, we will explore the impact that the termination of these programs would have on regional and local agricultural efforts. We will also examine the unique features of each program in order to determine whether or not they are meeting their congressional mandate.

The President's budget recommends an additional $3.6 million for the Economic Research Service. While almost $1.8 million of this amount will be used for pay and retirement costs, another $1.8 million would be used to maintain the Farm Costs and Return Survey and restore other research programs to their 1985 levels.

The National Agricultural Statistics Service collects and analyzes data for publication of agricultural forecasts and estimates. Commonly considered the most reliable source of agricultural surveys, the NASS has a number of ongoing efforts instrumental to farmers, ranchers, and agribusiness.

The fiscal year 1988 budget submitted by the President recommends an increase of $4.7 million for NASS, of which over $2 million will help meet pay and retirement costs. Other funds will be directed at long-term projects to convert surveys to probability-based procedures and to improve operations and statistical compilation.

On behalf of the subcommittee, I wish to welcome each of you here today. We look forward to hearing your testimony and invite you to make any comments you wish, in addition to your prepared statements which, of course, will be included in the hearing record. You may proceed in any order that you wish, provided that it meets with Dr. Johnsrud's approval. [Laughter.]

STATEMENT OF DR. BENTLEY

Dr. BENTLEY. Mr. Chairman, I am Orville Bentley. I will start with a brief statement. I would ask that my full statement be made a part of the record, and I will speak briefly just on the extension part, leaving the part on research and the National Agricultural Library to be brought up at their scheduled hearings. With this, I would like to start with a few comments, and then turn to Dr. Johnsrud.

We appreciate the opportunity to present an overview of the 1988 request for science and education of the USDA. The targets established in the Gramm-Rudman legislation have resulted in a number of very difficult choices in formulating budget proposals. I am pleased to report, however, that despite the lower overall deficit target, our science and education budget is higher this year than the request I presented a year ago.

In total, we are requesting $1.1 billion, or about $120 million less than our current estimate for the 1987 appropriations. As in prior years, we are proposing the elimination of certain earmarked programs, that can be addressed through other fund sources which are accorded high priority in the states.

Consistent with the past and current administration policy, our request places a high priority on support of the basic scientific research. Future scientific advance is crucial to the competitiveness of American agriculture. Our 1988 science budget reflects a careful balance of programs in various disciplines vital to enhancing the competitive posture of American farmers.

In the statement, there is reference made to biotechnology, to plant germplasm, and to university research, through the Cooperative State Research Service. That agency will come before you to talk about the cooperative state research program. It celebrated the centennial of the Hatch Act, which was passed on March 2, 1887.

Let me now make a few comments about extension.

EXTENSION SERVICE

I am pleased to report that our extension request for 1988 represents a significant increase over last year's proposal. Our budget will provide the first increase in formula funding under the Smith-Lever 3(b) and (c) since 1985, and will provide a 5-percent level of real growth for the 1890 institutions. Mr. Chairman, you noted that in your opening remarks.

As you know, there have been a number of studies in recent years which have examined the operations and the role of the extension system. Just last year, the Office of Technology Assessment issued a report on the impact of new technology on farming, including the important role of extension programs.

Extension has initiated a process to examine priorities for the system. Representatives from commodity organizations, producers, agribusiness organizations, research, and government are all involved in identifying priorities which will provide a framework for extension to reassess its programs to meet the current and emerging needs of agriculture and rural America.

While it is not in my statement, I want to pause and say how pleased we are that extension has taken this initiative. This collective effort between the Extension Service here in Washington and the Cooperative

Extension Services throughout the country is indeed a very refreshing development.

Strengthening and updating the extension programs to enhance profitability and the competitiveness of agriculture is one of the issues being addressed. Another is focusing on the changing needs of rural communities to orient extension, rural development resources, and towns to the pressing revitalization needs of these areas.

With your permission, Mr. Chairman, I would now like to present Dr. Johnsrud. I must say that we are delighted that he has just been appointed as Administrator of the Extension Service. We are delighted to have him here in the department.

I must say also, that as a North Dakotan, you can be proud of all the fine comments that I have received since we announced the appointment of Dr. Johnsrud to the position. I would like to turn to him now for his statement.

Senator BURDICK. Doctor, you are up to bat.

STATEMENT OF DR. JOHNSRUD

Dr. JOHNSRUD. Thank you, Mr. Chairman. I appreciate the warm welcome that you extended this morning with your comments. It is a rather special privilege for me to appear before your committee.

I am pleased to brief your committee about the President's fiscal year 1988 budget for extension. I would add that I am appearing for the first time. In previous years it was Dr. Mary Nell Greenwood, who unfortunately lost her battle with cancer last November, who was in the position that I have now assumed.

She is the one who started the change that Assistant Secretary Bentley was talking about, in terms of focusing our resources on priorities and initiatives, to help the Extension Service deal with these changing times of increased and rapid technology, dynamic economic, and social factors that we are encountering.

We are trying to address, in the extension system, these rapidly changing times of social and economic issues that face us, the globalization of our economy as it relates to agriculture and the family, and the rapid expansion of technology.

It is in that vein that we are specifically taking a hard look at how we are going to operate within the extension system. I will point out the things that we are attempting to do:

Focusing and prioritizing our resources more sharply on critical national, state and local issues;

Using more of a systems approach to programming;

Developing a philosophy of greater risk taking in determining program focus, priorities and implementation of strategies;

Analyzing the potential important role that the system may play in the practical application of the results of biotechnology generated research; and

We are continuing assessment of the system in terms of the most efficient and effective structure and staffing tailored to the needs and demands of today's clientele.

Our state partners, as the Assistant Secretary stated, are as enthusiastic as we are about what the system is attempting to do with regard to initiatives that focus our resources more sharply. As an initial effort, we convened a joint extension system task force in December that took the first steps in identifying critical issues and formulating direction for progressive change for the extension system nationwide. More than 125 extension professionals assembled here in Washington in a very intensive workshop to do just that task. Briefly, those initiatives focus on eight areas currently:

Agriculture competitiveness and profitability;
Alternative agricultural opportunities;
Water quality;
Conservation and management of natural resources;
Revitalization of rural America;
Improving nutrition, diet, and health;
Increasing family economic and emotional stability; and
Building human capital.

We have started the process for progressive change within the cooperative extension system with these initial efforts, a process designed to enhance the extension system's capacity to remain vital to the future of our nation's agricultural community and to our economy as a whole. The continued relevance of the cooperative extension system requires that it stay on the cutting edge, addressing critical national issues, and doing so in an effective and efficient manner.

BUDGET REQUEST

Now, Mr. Chairman, I want to turn specifically to the budget request. Our fiscal year 1988 budget request totals $262,587,000, which is $69,585,000, or 21 percent lower than the fiscal year 1987 appropriated level which was $332.2 million. Our proposed budget was built upon the following two considerations, which are essential to the cooperative extension system in addressing these national critical concerns, and those two considerations are:

No. 1, continue to stress federal support for our formula-funded program efforts conducted by our 1862 and 1890 institutions, including the University of the District of Columbia, Tuskegee University, and land-grant institutions in several territories.

No. 2, address the need to set extension priorities within the increasingly constrained federal budget by first eliminating categorical funding in areas such as nutrition, pest management, urban gardening, farm safety, and others.

Given the need to further reduce our federal deficits, our state partners support these criteria as appropriate for extension under the reduced federal support. As successful as our categorical programs have been over the year, we are proposing their elimination to enable the cooperative extension system every flexibility afforded by our formula funding and allow the states to address our nation's critical concerns within the formula funds.

Inflation adjusted levels of formula funding permit a consistent, stable, dependable and reliable programming source for state and county cooperators. Within our formula program, we are proposing an increase of $7.9 million for our 1862 institutions in all the states and territories; $1.4 million for 1890 institutions and Tuskegee University; and $35,000 for the University of the District of Columbia.

These additional funds will provide for the continuation and strengthening of ongoing high priority national concerns in such areas as restoration of profitability to agriculture, managing and conserving natural resources, including ground water quality, and management and proper use of pesticides and chemicals in agriculture. Revitalization of rural America is another issue along with nutrition, education, information, and assistance to minority and small-scale producers.

In conclusion, let me emphasize that the proposed elimination of all earmarked programs results from hard choices we made to operate within a very constrained federal budget. Let me also state that the proposed funding elimination will not necessarily result in program terminations. In most cases, high priority aspects of these earmarked programs can be continued by the states using formula funding or other sources.

PREPARED STATEMENTS

Mr. Chairman, this concludes my statement. I believe that the priorities we established with our state cooperators will enable the cooperative extension system to reach the direction we laid out for the system, and that is to respond to America's critical concerns.

Senator BURDICK. Thank you very much.

[The statements of Dr. Bentley, Dr. Johnsrud, and a biographical sketch follow:]

STATEMENT OF DR. ORVILLE G. BENTLEY

Mr. Chairman and members of the Committee, I appreciate this opportunity to present an overview of the 1988 request for the science and education programs of USDA. Targets established in the Gramm-Rudman legislation have resulted in a number of very difficult choices in formulating budget proposals. I am pleased to report, however, that despite the lower overall deficit target, our science and education budget is higher this year than the request I presented a year ago. In total, we are requesting $1.1 billion, or about $120 million less than our current estimate for 1987 appropriations.

As in prior years, we are proposing the elimination of certain earmarked programs which can be addressed through other sources if accorded a high priority by the States. Consistent with past and current Administration policy, our request places a high priority on support for basic scientific research which will form the basis for future developmental advances crucial to the competitiveness of American agriculture. Our 1988 science budget reflects a careful balance of programs in the various disciplines vital to enhancing the competitive posture of American farmers.

BIOTECHNOLOGY

Advances resulting from the application of biotechnologies will clearly be a major factor in assuring American agricultural competitiveness into the future. During the past year we've made significant progress in establishing a framework for the handling of biotechnology issues within the Department. Proposed research guidelines were published in June. Effective July 14, 1986, Secretary Lyng established an Office of Agricultural Biotechnology(OAB), whose director reports to me. This office has been delegated full responsibility for the coordination and implementation of policies and procedures regarding biotechnology.

For 1988, we are proposing a direct appropriation of $250 thousand to fund the operations of the OAB on a direct, stable basis. As the Committee knows, the products of biotechnology have been an important part of man's existence and culture for centuries, but only recently have we been able to harness these processes in specific, unique ways to produce innovative new products. However, the full development of this potential in the U.S. depends on our diligent pursuit of research and regulatory programs to support and nurture this developing industry. The OAB will provide the focal point for industry and academia for contact with USDA in biotechnology-related concerns. I urge the Committee to support our modest proposals in this area.

PLANT GERMPLASM

Support for biotechnology will be a hollow gesture without the basic materials needed by scientists to develop new and improved products. One of the most important of these inputs is genetic diversity. ARS is again proposing an increase in the area of plant germplasm to assure the availability of the genetic materials vital to crop plant improvements. Not one major crop plant is native to the U.S., making us particularly vulnerable to natural catastrophes resulting from a lack of diversity. An increase of $7.3 million is proposed to increase the collection and characterization of germplasm to enhance its usefulness to scientists. A related item proposes $1 million to fund the planning of a new seed storage lab in Ft. Collins, Colorado. As you know, this is the first facility request proposed by ARS in nearly ten years. Our proposal involves the construction of new seed storage vaults and renovation of the existing building to provide a modern long-term germplasm storage facility--the only one in the U.S. Our plan has the strong support of the Colorado State University, which is providing the land for the new building and will continue to provide excellent program support.

UNIVERSITY RESEARCH

Before I review our 1988 proposals for cooperative research, I want to recognize the centennial of the Hatch Act, enacted March 2, 1887, which established our system of experiment stations at the land-grant universities. We continue to look to this system as a key factor in developing new technologies and expertise in the agricultural sciences. For 1988, we are again proposing to focus our university research budget on formula support for the land-grant system and the highly successful competitive grants program. We propose to increase basic formula support under the Hatch Act by a modest five percent, the first increase since 1985. These funds continue to provide a stable source of research support to the States and have resulted in innumerable significant advances over the 100 year history of the program. Support for the 1890 Colleges and the forestry formula program would be increased by like amounts.

Support for the 1890 programs, which focus on primarily on concerns of minority and small farmers, remains a high priority of the Department. In addition to the formula funding increases, our priority in the area of small-scale farming is reflected by the recent establishment of an Office of Small-Scale Agriculture within CSRS. This office will be responsible for working with other agencies to focus resources on issues related to small-scale farmers and rural development.

SCIENCE AND TECHNOLOGY CENTERS

Our proposal also contains an increase of nearly 10 percent in the highly successful competitive grants program, which continues to receive many more meritorious proposals than can be funded. The increase will allow us to fund our share, about $3.5 million, of a $10 million program of plant science research to be jointly funded and operated with the National Science Foundation and the Department of Energy. Funding for research in the basic plant sciences has lagged far behind the level needed to support advances through biotechnologies and other applications. Results of this research will be crucial in our ability to deal with emerging crop production problems related to water shortages, disease and insect infestations, chemical residue concerns and other issues that are facing farmers. Through this coordinated approach, we intend to mobilize the resources and expertise of three Federal agencies to address issues in plant sciences through the establishment of science and technology centers on a competitive basis. Experience from the successful engineering centers operated by the NSF will be applied here. Active involvement of the private sector will also be an important feature of the centers.

EXTENSION

I am pleased to report that our Extension request for 1988 represents a significant increase from last year's proposal. Our budget would provide the first increase in formula funding under Smith-Lever 3b+c since 1985 and would provide a five percent level of real growth for the 1890 institutions.

As you know, there have been a number of reports in recent years whcih have examined the status and role of the Extension system. Just last year the Office of Technology Assessment issued a report on the impact of new technology on farming, including the effects on the extension programs. Extension has initiated a process to examine priorities for the system. Representatives from commodity organizations, producers, agri-business, extension, research and government are all involved in identifying priorities which will provide a framework for extension to reorient its programs to meet the current and emerging needs of agriculture and rural America. Strenghthening and updating extension programs to enhance profitability and competitiveness of agriculture is one of the issues being developed. Another is focusing on the changing needs of rural communities to orient extension rural development resources and talents to the pressing revitalization needs of those areas.

NATIONAL AGRICULTURAL LIBRARY

Although smallest in terms of budget, the National Agricultural Library is contintinuing to play an important role in information dissemination. NAL is continuing to fund a number of innovative projects in information technology development, cooperation with Land-Grant libraries to reduce duplication of services, creation of information centers to focus on current topics and upgrading of information systems within NAL to better serve users. To continue these efforts and assure adequate funding for urgently needed preservation and acquisition efforts, we are proposing to increase the NAL budget by $1.3 million, to $12.4 million.

ALTERNATIVE CROPS

Mr. Chairman, before I conclude my statement, I would like to update the Committee on some exciting progress in the development of alternative crops. Through an agreement with the Defense Department, we are managing a research and development project on guayule--a native source for natural rubber. We are making progress, and expect that our private sector cooperator will be operating a pilot processing plant beginning next year. On another front, we have been working with a private concern to demonstrate the feasibility of producing kenaf--an annual fiber crop--as a pulp source for newsprint production. The possibilities for developing this new crop in the southeast as a substitute for imported newsprint appear very promising. These are just two projects which have a good potential for profitable new ventures for agriculture.

This concludes my prepared remarks. The individual agency administrators will be providing additional details on their budgets and accomplishments during the past year.

STATEMENT OF DR. MYRON D. JOHNSRUD

Mr. Chairman and members of the Committee, I appreciate the opportunity to discuss with you the FY 1988 President's proposed budget for the Extension Service.

I am appearing for the first time before this Subcommittee as Administrator of the Extension Service, succeeding Dr. Mary Nell Greenwood who unfortunately lost her battle with cancer last November. Let me express, at this juncture, the great sense of loss to the Cooperative Extension System and others in the agricultural community with her passing.

Mr. Chairman, to a large extent, the current prevailing resolve within the Cooperative Extension System to restructure and target programs to address critical National issues was initiated under Dr. Greenwood's leadership. The the rapid expansion of technology, dynamic economic, social and value changes, and globalization of the economy have required Extension to continuously adapt its programs and activities to meet clientele needs. More specifically, the Cooperative Extension System is taking a hard look at its operations with a view toward:

- Focusing and prioritizing resources more sharply on critical National, State and local issues and concerns

- Using more of a systems approach to programming rather than the traditional segmented approach to problem solving

- Developing a philosophy of greater risk taking in determining program focus, priorities and implementation strategies

- Analyzing the potential important role of the System in the practical application of the results of biotechnology generated research

- Continuing assessment of the System in terms of the most efficient and effective structure and staffing tailored to the needs and demands of today's clientele

Our State partners in the Cooperative Extension System are as enthusiastic as we are with regard to these new and exciting ventures which are intended to usher in a new era of progressive, positive change in Extension. As an initial effort, we convened a joint Extension System Task Force charged with identifying critical issues and formulating direction for progressive change for Extension nationwide. More than 125 Cooperative Extension Staff journeyed to the Nation's capital last December to draft a blueprint which will define Extension's role in addressing critical concerns in the following National issues:

. Agricultural Competitiveness and Profitability
. Alternative Agricultural Opportunities
. Water Quality
. Conservation and Management of Natural Resources
. Revitalization of Rural America
. Improving Nutrition, Diet, and Health
. Increasing Family Economic and Emotional Stability
. Building Human Capital

We have started the process for progressive change within the Cooperative Extension System with these initial efforts, a process designed to enhance the Extension System's capacity to remain vital to the future of our Nation's agricultural community and to our economy as a whole. The continued relevance of the Cooperative Extension System requires that it stay on the "cutting edge," addressing critical National issues, and and doing so in an effective and efficient manner.

FY 1988 Budget

Our FY 1988 budget request totals $262,587,000, which is $69,585,000 or 21% lower than FY 1987 appropriated level of $332,172,000. Our proposed budget was built upon the following considerations which are essential to the Cooperative Extension System in addressing our Nation's critical concerns:

- Continue to stress Federal support for our formula funded program efforts conducted by our 1862 and 1890 institutions including the University of District of Columbia, Tuskegee University, and land-grant institutions in several territories.

- Address the need to set Extension priorities within the increasingly constrained Federal budget by first eliminating categorical funding in areas such as: nutrition, pest management, urban gardening, farm safety, and others.

Given the need to further reduce our Federal deficits, our State partners support these criteria as appropriate for Extension, under conditions of reduced Federal support. As successful as our categorical programs have been over the years, we are proposing their elimination to enable the Cooperative Extension System every flexibility afforded by our formula funding and to allow them to address our Nation's critical concerns. Inflation adjusted levels of formula funding permit a consistent, stable, dependable, and reliable programming source for State and county cooperators. Within our formula programs, we are proposing increases of $7.9 million for our 1862 institutions in all the States and territories; $1.4 million for 1890 Institutions and Tuskegee University; and $35,000 for the University of the District of Columbia.

These additional funds will provide for the continuation and strengthening of ongoing high-priority National concerns in such areas as restoration of profitability to agriculture; managing and conserving natural resources including ground water and highly erodible croplands; management and proper use of pesticides and chemicals in agriculture; revitalizing rural America; generating critical research-based nutrition education and information; and assistance to minority and small-scale producers.

Let me emphasize that the proposed elimination of all earmarked programs results from hard choices we made to operate within a very constrained Federal budget. Let me also state that the proposed funding elimination will not necessarily result in program terminations. In most cases, high priority aspects of these earmarked programs can be continued by the States using formula funding or other sources.

Mr. Chairman, this concludes my prepared statement. I believe that the priorities we established with our State cooperators will enable the Cooperative Extension System to reach the direction we laid out for the System---that is to be able to respond to America's critical concerns.

Biographical Sketch

MYRON D. JOHNSRUD
Administrator, Extension Service
U. S. Department of Agriculture

A North Dakota farmer and former County Extension Agent, Myron D. Johnsrud became Administrator of Extension Service, USDA, on July 14, 1986. As the federal partner of the nationwide Cooperative Extension System, Extension Service provides national program leadership, management, policy formulation, and organizational coordination and administration to the educational programs and policies of the 50 states, territories, and more than 3,100 counties in the system.

Dr. Johnsrud comes to Washington, D.C., from North Dakota State University (NDSU) where he served as Director of the Cooperative Extension Service for 12 years beginning in 1974. A native North Dakotan, he began farming in a

McKenzie County grain and livestock partnership after graduating from NDSU in 1957 with a B.S. in mechanized agriculture.

Johnsrud relinquished active participation in the farming partnership in 1964 to accept employment as an Assistant County Extension Agent in Williams County. In 1966, he received a W.K. Kellogg Foundation Scholarship for graduate studies at the University of Wisconsin in the National Agricultural Extension Center for Advanced Study. He received his M.S. degree there in 1967 and stayed on to complete his PhD degree in 1969.

Johnsrud returned to the North Dakota Cooperative Extension Service as State Leader of Personnel and Program Development until 1971, when he joined the Extension Service, USDA, staff as Director of Staff Development. In March 1973, he returned to North Dakota as Associate Director of the Cooperative Extension Service, a position he held until becoming Director.

Johnsrud has served as a member of the Extension Committee on Organization and Policy (ECOP) and chaired its Legislative Committee. Presently a member of the National 4-H Council Executive Board; he co-chaired the extension Service/ECOP Committee on Electronic Technology.

Also active in community and service organizations, Johnsrud served on the Board of Directors of the Prairie Public Television Corporation and represented the Governor of North Dakota at the White House Conference on Balanced National Growth and Economic Development in 1978. He is also a former U.S. Air Force and Air National Guard Pilot. Johnsrud is married and has two children.

ECONOMIC RESEARCH SERVICE

STATEMENT OF JOHN E. LEE, JR., ADMINISTRATOR

ACCOMPANIED BY B.H. (BOB) ROBINSON, ASSOCIATE ADMINISTRATOR

Senator BURDICK. Dr. Bentley, who is your next witness?

Mr. BENTLEY. Mr. Wilson.

Senator BURDICK. Mr. Wilson, please proceed.

Mr. WILSON. We, in the economic agencies, appreciate this opportunity to appear before you today and discuss the programs and budgets of USDA's economic agencies.

Given the financial stress plaguing some parts of the farm sector, together with the continued large federal budget deficit, the need for statistically reliable data and objective economic analysis of agriculture and the rural sector is of great importance.

The mission of the economics agencies is to try to meet this need, to put into the hands of the public and private decisionmakers data and analysis which they can then use and rely on for accuracy and objectivity. This is a challenging task, but it is one which these agencies have carried out, I believe, with a great deal of success over the years.

Mr. Chairman, with your permission, I would like to have each of the heads of these agencies present to you their program and budget requests for fiscal year 1988. I would suggest that we begin with John Lee, who is Administrator of the Economic Research Service, and then that we proceed to Mr. William Kibler who is Administrator of the National Agricultural Statistics Service.

Senator BURDICK. Very well. Mr. Lee.

STATEMENT OF MR. LEE

Mr. LEE. Thank you, Mr. Chairman. It is a pleasure to be back before this committee. We haven't had the opportunity in the last 2 or 3 years to meet with you, and we are happy to be here.

Mr. Chairman, one of the highly respected economists, Don Paarlberg now at Purdue University and formerly of the department, once said that the Economic Research Service must be the honest mirror to agriculture and rural America.

These words are, in essence, our mission statement. Policymakers such as yourself and the public must have a dependable source of honest, undistorted information if realistic decisions are to be made. Only ERS has the capacity and responsibility to produce such information at the national level.

What we do to carry out our mission is constantly changing. ERS is a response-driven institution. The real world changes, the information needs of decisionmakers change, and the programs of ERS respond to these changing needs.

ERS is noted for its expertise on a wide range of subjects.

In recent years, we have had a tremendous growth in demand for economic information and intelligence, including everything from our ongoing information that we provide to the public to a growing number of special requests from the Congress, analyses needed by the Department of Agriculture to implement and carry out its programs, and a growing number of requests directly from the public.

The demand for ERS services has increased substantially, and, what has happened in the face of tight resources and strong demand is that we have really become a better organization because we have had to focus on what are our priorities and what we can do with those resources to service the American farm public as well as policymakers. We think that a lot of good has come out of this tight situation.

We have responded, realizing that we could not be all things to all people. We ask ourselves what is absolutely critical to the Congress, to the administration, and to the American farmer. What is uniquely the responsibility of the Economic Research Service?

In that kind of a critical examination context, we now focus on national and international issues of the greatest policy significance, and on issues related to the programs and legislative responsibilities of the Department of Agriculture given to it by the Congress.

All of our international work is now focused on understanding current and prospective U.S. agricultural exports. What can we do to overcome barriers and to expand those exports?

We redirected our rural development program toward the program responsibilities of USDA as mandated by the Congress, and we stepped up our joint planning with universities to ensure that we and these publicly funded institutions have truly complementary programs, and that together we make the best use of our resources.

We have instituted a number of operating efficiencies to allow us to do our work faster, better, and with fewer staff. In short, we are trying, with our staff, to do the right thing, to do the thing right, and to do it efficiently.

Items that will receive high priority in 1988 include:

First, a restoration of a strong program of commodity analysis to ensure that we can provide the best possible information to farmers, to agribusiness, and to policymakers, and, in turn, make sure that they have the most useful understanding of what is happening in commodity markets and what the prospects are.

We have always had a program in this area, but as competing demands have come in over the recent years, we have allowed that program to deteriorate a bit. We are now going to be internally redirecting, restoring, and strengthening that commodity analysis program.

We will put major emphasis on understanding how monetary and fiscal developments in the general economy, here and abroad, affect the fate of U.S. agriculture, and on understanding how developments in the farm sector affect employment and economic activity in the rest of the food and fiber system, and in the general economy.

We now have the experts who can and do track the implications for the agribusiness community of changes in tax policy, money supply, exchange rate, and other monetary and fiscal phenomena that impact on the farm sector.

A major continuing emphasis in 1988 is to sort out U.S. agriculture's competitive position in the world market and the potential effects of and strategies for trade liberalization and improvement.

We plan also to launch a major effort to monitor and evaluate new, emerging, and potential technologies. What do these new and emerging technologies imply for adjustments in agriculture and for the workability of traditional farm programs?

We plan to continue our emphasis on the economics of conservation that enabled us, for example, to anticipate the recent interest in a conservation reserve. We were ready with research results and the capacity to respond to policy questions when the need arose.

We feel that bringing our information and expertise to bear on the Multilateral Trade Negotiations [MTN] and the United States-Canada negotiations is very important. We have close working relationships with USDA's Foreign Agricultural Service and with the Office of the U.S. Trade Representative. We have a program of analysis under way to support the negotiations. We will further strengthen this high-priority work in 1988.

We also plan to continue making program management improvements which have included, among other things, pooling our survey funds and redirecting other funds to establish an annual financial survey that is now the only reliable national source of data on the financial condition of the American farmer.

Mr. Chairman, these are tough times, but that is all the more reason to have good analysis and good data on which to base decisions. We are committed to make effective use of every dollar that you and your committee appropriate for the Economic Research Service, to provide good, solid, objective, honest, and useful economic information.

Our budget request of $49 million reflects the administration's support of ERS and its intent to maintain ERS's program level in real terms.

Thank you, Mr. Chairman.

PREPARED STATEMENT

Senator BURDICK. Thank you, Mr. Lee. your complete statement will be inserted in the record.

[The statement follows:]

STATEMENT OF JOHN E. LEE, JR.

What is ERS?

Mr. Chairman and distinguished members of the Committee, the respected agricultural economist Don Paarlberg once said that: "ERS must be the honest mirror to agriculture and rural America." Those words are in essence our mission statement. Policymakers (such as yourselves) and the public must have a dependable source of honest, undistorted information if realistic decisions are to be made. Only ERS has the capacity and responsibility to produce such information at the national level.

What we do to carry out our mission is constantly changing. ERS is a response-driven institution. The real world changes; thus the economic information needs of decisionmakers change. And the programs of ERS respond to those changing needs; ERS's tradition is one of responding to the changing needs of the times.

ERS is noted for its experts on a wide range of subjects:

- These experts do research and staff work and provide ongoing analysis and data that monitor the performance, health, and evolution of American agriculture.

- These experts are regularly responding to the needs of the Congress, the Administration, and the American farmer.

- These experts cover commodity markets, world agricultural trade, the state of agriculture in the rest of the world, the linkage between U.S. agriculture and the rural economy, land and water economics, and the economics of the food and fiber system (from inputs to consumers).

Rising demand for ERS services requires facing up to priorities

The demand for ERS services has increased. For example, the number of staff analyses we've been asked to do by Congress and the Administration has more than doubled. In addition, we responded to 74,767 public inquiries in 1986. And those staff analyses and responses to public inquiries are accomplished by our staff who already have a full plate of ongoing research, outlook analyses, and production of farm and rural economic indicators. In the face of these rising demands, the number of ERS staff has declined by about 20 percent since 1980.

The combination of rising demand for our services and declining staff has had some positive benefits, nevertheless. We've had to become more efficient, productive, and priority-oriented.

How had ERS responded?

Realizing that we could not be all things to all people, we asked ourselves, "What is absolutely critical to the Congress, Administration, and American farmer?" and "What is uniquely our responsibility?"

- We now focus on national and international issues of the greatest policy significance and on issues related to the programs and legislated responsibilities of USDA.

- All of our international work is now focused on understanding current and prospective U.S. agricultural exports.

- We redirected our rural development program toward the program responsibilities of USDA as mandated by Congress.

- We stepped up our joint planning efforts with universities to ensure that we and those publicly-funded institutions have truly complementary programs.

- We instituted a number of operating efficiencies that allow us to do our work faster, better, and with fewer staff.

In short, we aim to:

Do the right thing;
Do the thing right; and
Do it efficiently.

New initiatives

Items that will receive high priority in 1988 include:

- We will put major emphasis on understanding how monetary and fiscal phenomena and developments in the general economy, here and abroad, affect the fate of U.S. agriculture, and on understanding how developments in the farm sector affect employment and economic activity in the rest of the food and fiber system and in the general economy. We now have the experts who can and do track the implications for the agribusiness community of changes in tax policy, the money supply, or the exchange rate.

■ A major emphasis in 1988 is to sort out U.S. agriculture's competitive position in the world market and the potential effects of and strategies for trade liberalization.

■ We plan to launch a major effort to monitor and evaluate new, emerging, and potential technologies. What do these imply for adjustments in agriculture and for the workability of traditional farm programs?

■ We plan to continue our emphasis on the economics of conservation that enabled us to anticipate the recent interest in a conservation reserve. We were ready with research results and a capacity to respond to policy questions when the need arose.

■ We feel that bringing our information and expertise to bear on multinational trade negotiations (MTN) and U.S.-Canada negotiations is important. We have close working relationships with USDA's Foreign Agricultural Service and the Office of the U.S. Trade Representative and have a program of analysis under way to support the negotiations. We will further strengthen this high priority work in 1988.

■ We also plan to continue making program management improvements, which have included establishing a successful user fee program, piloting electronic dissemination of outlook information, initiating public access to ERS databases via the sale of data tapes and disks, establishing an ERS-wide database management system, and pooling our survey funds and redirecting other funds to establish an annual financial survey that is now the only reliable national source of data on the financial condition of the American farmer.

These are tough times; but that is all the more reason to have good analysis and good data on which to base decisions. We are committed to make effective use of every dollar that you appropriate for the Economic Research Service to provide good, solid, objective, honest, and useful economic information. Our budget request of $49 million reflects the Administration's support of ERS and its intent to maintain ERS's program level in real terms.

Thank you, Mr. Chairman.

BIOGRAPHICAL SKETCH

B.H. (Bob) Robinson, Associate Administrator, ERS

Bob Robinson assumed the post of Associate Administrator of the Economic Research Service, U.S. Department of Agriculture, on June 8, 1986.

Prior to his current post, Robinson was Head of the Department of Agricultural Economics at Clemson University where he directed the academic, research, and extension programs in agricultural economics for Clemson University. Robinson has served in several academic and government posts including professor of agricultural economics at Clemson University and research and supervisory posts with the Economic Research Service. He is also active in several professional associations. He has served as Chairman of the National Public Policy Committee and currently serves as Vice President of the Southern Agricultural Economics Association. Robinson has served as a consultant in both the government and private sectors. He has published articles in several professional and trade publications and has presented invited addresses on agricultural policy and trade at numerous professional, trade, government, and producer association meetings.

Robinson was born in Madison County, North Carolina. He holds a bachelor's degree from Berea College, an M.S. from North Carolina State University, and a Ph.D. from Clemson University.

NATIONAL AGRICULTURAL STATISTICS SERVICE

STATEMENT OF WILLIAM E. KIBLER, ADMINISTRATOR

ACCOMPANIED BY RAYMOND R. HANCOCK, DEPUTY ADMINISTATOR, OPERATIONS

OPENING STATEMENT

Senator BURDICK. Your next witness.

Mr. KIBLER. Mr. Chairman, it is also a pleasure to appear before your committee today and to discuss the budget for the National Agricultural Statistics Service. With your permission, I would like to just highlight my statement, and have the full statement put into the record.

Senator BURDICK. Without objection, so ordered.

Mr. KIBLER. Our agency name was changed last year from the Statistical Reporting Service to the National Agricultural Statistics Service to provide us with better identity within the agricultural and statistical communities.

NASS administers USDA's program of collecting, compiling, and disseminating current national and state agricultural statistics. We conduct a small research program designed to improve the statistical methods and techniques used to produce these agricultural statistics.

Statistical data developed by NASS are essential for production and marketing decisions by our farmers, ranchers, and other agribusinesses. They are also used to monitor the ever changing agricultural industry for the formulation and the administration of agricultural policy relating to farm program legislation, commodity programs, agricultural research, and related activities.

The primary activities of NASS are the collection, summarization, and analyses of data and publication of accurate and reliable agricultural forecasts and estimates. Thousands of farmers, ranchers, agribusinesses, and others voluntarily respond to nationwide surveys about crops, livestock, and other agricultural activities, and provide the basic data that we need for our programs.

The agricultural production and marketing data that are developed and published by NASS include number of farms and land in farms, acreage, yield, and production of crops, stocks of grain, inventories and production of livestock and poultry items, prices received by farmers for products they sell, and prices that farmers must pay for inputs that they need in their production.

This program is conducted through 44 state statistical offices serving all 50 states. These offices are operated under cooperative funding arrangements with State Departments of Agriculture and/or land-grant universities. This arrangement really efficiently serves the agricultural data needs at both the state and federal levels, and eliminates significant duplication of effort.

We conduct research to improve the statistical methods and techniques used in developing agricultural statistics. This research is directed toward improving sampling, yield forecasting, and survey techniques.

NASS also conducts surveys on a reimbursable basis for other federal, state, and private agencies or organizations. Our survey capability allows us to respond to these in a more efficient way than if each of these did its own independent survey.

The NASS also periodically solicits input on data needs and priorities from data users through individual contacts, meetings with commodity groups, briefings by Agricultural Statistics Board staff, and other departmental and federal agencies, and regional data user meetings.

The most recent series of these data user meetings was just completed in February. We have made a number of adjustments in our program in response to suggestions made by data users.

We have a long-range plan under which the agency operates. It recommends that we move all of our surveys to a probability-based, scientifically reliable sampling basis, and we have been doing that since 1985. We have an increase in our budget that is strongly supported by an outside review panel to continue to move our crop surveys over to a probability basis. The funds requested this year, $800,000, are for a third segment of a four-phase program to accomplish that.

Another increase of $500,000 is requested to improve the Agricultural Statistics Board methodology. This increase would allow the board to improve its overall capability for analysing and evaluating the data that come in through an improved base environment. That is really critical as we measure the ever-changing scenes in today's agriculture. It is also a four-phase project, and this would be the second phase of that 2-year program.

PREPARED STATEMENT

Mr. Chairman, this summarizes my remarks, and we would now proceed to questions as you please.

Thank you.

[The statement follows:]

STATEMENT OF WILLIAM E. KIBLER

Mr. Chairman and members of the Committee, it is an honor to appear before this distinguished Committee to present the National Agricultural Statistics Service's (NASS) FY 1988 budget request. The Committee's continued recognition of the need for a strong agricultural statistics program and your support are appreciated.

Our agency's name was changed last year from the Statistical Reporting Service to the National Agricultural Statistics Service to provide a better identity within the agricultural and statistical communities. In addition, the former Crop Reporting Board was renamed as the Agricultural Statistics Board.

The NASS administers the USDA's program of collecting, compiling, and disseminating current national and State agricultural statistics. Research designed to improve the statistical methods and techniques used to produce agricultural statistics is also conducted. In addition, NASS performs reimbursable survey work for other Federal, State, and producer organizations.

Statistical data developed by NASS on the Nation's agriculture are essential for the orderly development of production and marketing decisions by farmers, ranchers, and other agribusinesses. These agricultural data series are also used to monitor the everchanging agricultural industry for formulation and administration of agricultural policy relating to farm program legislation, commodity programs, agricultural research, and related activities.

Fiscal Year 1988 Budget Request

The fiscal year 1988 budget request is $63,014,000. This request includes an increase of $800,000 for continuation of the shift of major crop surveys to probability-based procedures. Additional increases include $500,000 for improving the Agricultural Statistics Board (ASB) methodology through establishment of an expanded data base environment, $1,412,000 for increased operating costs, $1,669,000 to fund increased costs associated with the new Federal Employees Retirement System, and $339,000 to annualize 1987 pay costs.

Major Activities of the National Agricultural Statistics Service (NASS)

The primary activities of NASS are the collection, summarization, and analyses of data and publication of accurate and reliable agricultural forecasts and estimates. Thousands of farmers, ranchers, agribusinesses, and others voluntarily respond to nationwide surveys about crops, livestock, and other agricultural activities. These surveys are supplemented by field observations, objective yield counts and measurements, and other administrative data to provide reliable information. Annually, estimates for about 120 crops and 45 livestock items are published in about 300 reports prepared by NASS's ASB.

The agricultural production and marketing data that are developed and published by NASS include: number of farms and land in farms; acreage, yield, and production of grains, hay, oilseeds, cotton, tobacco, fruits, vegetables, floriculture, and specialty crops; stocks of grains; inventories and production of hogs, cattle, sheep and wool, goats, catfish, poultry, eggs, and dairy products; prices received by farmers; prices paid by farmers for inputs and services; cold storage supplies; and other data related to the agricultural economy.

The NASS estimating program is conducted through 44 State Statistical Offices (SSO's) servicing all 50 States. All of these SSO's are operated under cooperative funding arrangements with State Departments of Agriculture and/or Land-Grant universities. This arrangement efficiently serves the agricultural data needs at both the State and Federal levels and eliminates duplication of effort. Twenty of the NASS State offices are physically located in State office buildings. These beneficial colocations provide increased service and additional agricultural data for State and local needs.

A research program is conducted to improve the statistical methods and techniques used in developing agricultural statistics. This research is directed towards improved sampling, yield forecasting, and survey techniques. Research under the remote sensing program is continuing to increase the accuracy of domestic and foreign crop acreage and land cover estimates.

The NASS also conducts surveys on a reimbursable basis for other Federal, State, and private agencies or organizations. Our existing survey capability can provide these services much more efficiently than each agency conducting its own surveys. In addition, technical assistance in the development of agricultural estimating programs in foreign nations is also conducted on a reimbursable basis.

The NASS periodically seeks input on data needs and priorities from data users through individual contacts, meetings with commodity groups, ASB briefings, other Departmental and Federal agencies, and regional data user meetings. The most recent series was completed in February 1987. The Agency has made many adjustments in its program in response to suggestions made by data users indicating that new data series or changes in current series are needed. Users support the policy that statistical efforts should continue to place emphasis on data quality over quantity. However, requests continue for expanded detail, wider geographic coverage, more frequent reports, and new data series.

Fiscal Year 1988 Plans

The NASS Long-Range Plan contains a recommendation to continue to convert major surveys to probability-based procedures including the crop acreage surveys. A review of the Department's statistics and economics programs was conducted in 1985 by a panel of experts from universities and the private sector. This panel added strong support for this recommendation. An increase of $800,000 is requested to continue the NASS effort started in 1985 to accomplish this objective. These funds would implement the third phase of a 4-year program to place all major crop surveys on a probability basis.

An increase of $500,000 is requested to improve ASB methodology. This increase would allow NASS to improve the ASB capability to effectively evaluate all survey components and auxiliary information through establishment of an improved data base environment. In addition, a research and analysis effort will be continued to develop and implement composite estimators and time series analysis procedures that have been tested in research trials.

Data users are becoming more sophisticated with their own statistical techniques and understand the need for statistically defensible and repeatable ASB procedures. These funds would implement the second phase of a 4-year program to update ASB methodology.

The budget request includes $1,412,000 for increased operating costs. These resources are needed to maintain the core program because of increased costs incurred for travel, printing, communication services, supplies, equipment, machine maintenance, staff transfers, and ADP services.

An increase of $1,669,000 is requested to fund increased costs associated with the Federal Employees Retirement System. This new expenditure cannot be absorbed without affecting critical parts of the base crop and livestock estimating program. The budget request includes $339,000 to annualize 1987 pay costs. The agency cannot absorb this new expenditure without sharply reducing its program output.

This concludes my statement, Mr. Chairman, and I will be happy to respond to your questions.

SECTION 1440

Senator BURDICK. Section 1440 of the Food Security Act authorized funds for financially distressed and displaced farmers through matching and competitive grants programs. Eight states, including my home state of North Dakota, were selected to receive matching grants through land-grant institutions totaling $3.35 million in fiscal year 1987.

The purpose of these grants is to provide a broad range of educational counseling services, including the development of both farm and nonfarm income alternatives and planning, management and training opportunities in other fields.

My first question is, Dr. Johnsrud, in view of the severity of the farm crisis and its adverse impact on the family farmer, do you believe that funding for section 1440 will offer necessary assistance?

Dr. JOHNSRUD. Mr. Chairman, North Dakota and some other states have submitted their plans. As I said in my prepared comments, we had to make some hard choices on what we were able to put into our budget, and what was possible. As I indicated, the formula fund increase will help if the state wishes to allocate some of those increases to that specific issue of the farm financial stress and management.

We see a lot of things happening out in the country. There are, for example, about 2,000 counties out of the 3,100 across this nation working in that specific area, some with special funds such as you have indicated, and others with internal reallocation of resources. They are effective programs.

Senator BURDICK. The Food Security Act authorized the section 1440 programs for 3 fiscal years, yet the $3.35 million appropriations for fiscal year 1987 have hardly been allocated and already this program is slated for elimination.

Do you think that section 1440 will have its optimal impact in 1 fiscal year?

Dr. JOHNSRUD. I don't think that the program is going to be totally effective in 1 year. Again, Senator, it seems to me that the initiative has enabled the states to plan for, gear up and begin initiating the program.

We have seen, for example, that specially designated federal funds have prompted the effort to begin with some intensity, oftentimes the states reallocate resources, and/or the state legislatures will appropriate funds. The best data that we have indicate that for $1 million allocated through the federal trust, we see about a $10 million program eventually evolve over time because of other sources of funds coming in to help support it.

No; I don't think that we would ever want to say that in 1 year, the total program can be done because the problem is not short-term.

Senator BURDICK. Would the section 1440 programs be more effective if permitted to continue through fiscal year 1988?

Dr. JOHNSRUD. I am hoping that the intensive effort that is going on across the country will continue. I am not so sure that the state extension services have much choice because of the issues that the farm families are facing. Obviously, the states are facing difficult financial situations, and we face a difficult situation in terms of our budget deficit problem.

Senator, I don't see how they can really not continue in some fashion with some of their own funds because the problem has not gone away.

EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM

Senator BURDICK. Another one of the eight earmarked programs under section 3(d) of the Smith-Lever Act that would be terminated under the President's budget is the Expanded Food and Nutrition Education Program, known as EFNEP. In recent years, funding for this nutrition education program has come under close scrutiny by Congress. In fiscal years 1986 and 1987, EFNEP was funded at $57.6 million.

Could you please tell us how many households and individuals are currently being served by EFNEP?

Dr. JOHNSRUD. Mr. Chairman, approximately 290,000 families are being served by that program, and about double that number of young people are reached as part of the youth portion of that program.

Senator BURDICK. Do you know what portion of EFNEP households are food stamp recipients?

Dr. JOHNSRUD. About 66 percent. Mr. Chairman, 35 percent are also involved in the women, infants, and children program.

FEDERAL EMPLOYEE RETIREMENT SYSTEM

Senator BURDICK. The Extension Service proposes pay and retirement adjustments for federal employees in Washington, D.C., yet no mention is made of the approximate 13,000 federal appointees at land-grant institutions throughout the country.

How will the Federal Employee Retirement System affect the people who work for the Extension Service in the field?

Dr. JOHNSRUD. Mr. Chairman, we have a really serious issue there that has evolved with the advent of the new FERS retirement system. We are working with several alternatives right now trying to figure out a way to resolve that very difficult issue. The figures that we have now, relative to this, look like about $6.5 million in terms of additional resources needed for that change in the program in fiscal year 1987.

For 1988, our best figures right now are about $23.6 million, and that is based on the Office of Management and Budget formula on how to project the calculation of those costs. So it is a very serious issue, and we have no way to fund it from current sources that we have. So there is going to be a serious impact on the system.

Senator BURDICK. Staff tell me, however, that those numbers are not in the budget.

Dr. JOHNSRUD. They are not.

Senator BURDICK. What do they mean, then?

Dr. JOHNSRUD. We developed this budget before we had the figures on what the impact of this would be on our system.

Senator BURDICK. Has there been any consideration of putting this matter in the supplemental?

Dr. JOHNSRUD. That would be one option, yes.

Senator BURDICK. It would be an option, but are you thinking about doing it?

Dr. JOHNSRUD. That option is under consideration. I mentioned that there were several options that we were looking at, and this is one of the options.

FINANCIAL MANAGEMENT

Senator BURDICK. In each of the past 2 fiscal years, Congress has appropriated over $1.4 million for financial management programs to provide guidance and counseling to distressed farmers to help them keep their farms. In each of the past 2 fiscal years, the President's budget has recommended eliminating the financial management program.

If the President's budget were adopted in its entirety, where would distressed farmers go for financial management assistance?

Dr. JOHNSRUD. This issue, Mr. Chairman, is the same as the 1440 question in some respects, except that those funds you have referred to have been allocated to 22 states this past year. In 1986, there were funds, usually less than $100,000 per state, to help supplement their intensified efforts in farm financial management. So it is currently reaching 22 states.

Again, that was one of the hard decisions we had to make because of the budget constraints, and one that was not included in our recommendations as you are well aware. Currently, it is allocated in 22 states.

Senator BURDICK. I yield to the Senator from Iowa for his questions.

FINANCIAL CONDITION OF FARMERS

Senator GRASSLEY. Thank you, Mr. Chairman.

I guess I would, first of all, direct my questions to you, Mr. Lee, or whoever wants to answer.

I think the reference in your statement, if I interpret it right, that you have pooled survey funds to provide a reliable national source of data on the financial condition of American farmers.

Then, in light of the fact that the Farm Credit System is going to be needing help pretty soon, still our agricultural bankers and commercial bankers are in considerable trouble. I would like to know if you have considered the bottom line of the ability to meet financial problems, of course, whether there is enough income to service the outstanding debt.

From the standpoint of what you have studied, have you noticed any improvement in the financial status of American farmers during the period of time that you have gone this extra effort to pool the resources?

If that is a short period of time, then I want to know what you found as a result of that versus any prior benchmark you had.

Mr. LEE. Yes; we have been monitoring in the Economic Research Service, the financial situation in agriculture since the 1930's. We have put together the measures, for example, the estimates for farm income and other measures that we have produced. These measures have been put together each year with the best information that we could pull together from a variety of sources, including some survey data, but also data from other places.

What we did about 3 years ago was to say, we have an unusual situation here. We have to have more indepth, detailed information. We pulled data from a variety of surveys, working directly with the National Agricultural Statistics Service, in a joint effort between the two agencies, and we designed a survey that we have redesigned each year for the last 3 years. We are in the field right now collecting information on the status of the situation as of January of this year.

We have now a body of data, while not perfect certainly, it doesn't give us perfect insight into everything, which would be prohibitively expensive, but it does give us a nationally based sample that is statistically reliable and that provides us insight as to who is in trouble, to some extent why they are in trouble, and the characteristics of the various farms, including the extent to which these people participate in and benefit from the commodity programs, and other deficiency payment programs.

Have things gotten better?

Senator GRASSLEY. Yes; and then the followup of that, you just led me to it, ought to be, considering, in the President's budget, a reduction of 10 percent of target prices, how you see that impacting upon whatever summary you are giving me of where the farmer is today from your statistics.

Mr. LEE. First, in terms of looking at the situation, and monitoring it, what we have seen, I don't have to tell you, is a very painful adjustment, which we have not tried to judge, but we have simply tried to provide an honest measure of what actually is going on, an impartial assessment of it.

What we have seen is not only the loss of assets, the rapid declines in land values as we adjusted to more realistic market expectations, but many of the farmers who were caught in heavy debt are the ones who are in the most trouble. We have 10 or 15 percent of American farmers, particularly concentrated in the commercial farm sector, those who are farming for a living, who are in serious trouble.

What has happened over the last 2 or 3 years, our data reveal, is that we have now come to more clearly identify who that set of people is, and we have had a stabilization of this situation in the sense that we haven't had a rapid increase in the number of people going into that distressed category. We know who those people are, and it is now a situation of sorting out how those people are going to get out of that situation that they are in.

We see some slight decline in the number of highly distressed farmers, and we see some things stabilizing. For example, land values, which declined very rapidly for several years, will decline further from 1986 to 1987, but we think now that that decline will be very modest and should either stabilize or decline very little from where they have declined now.

We see the farm debt situation, which is the real core of the problem, not only stabilizing, but the farm debt situation is beginning to improve. The overall farm debt is beginning to decline significantly. This year, late in 1986 and into 1987, our reports indicate, as well as the feedback that we get from the banking system and other places, that the farm debt is beginning to decline rather substantially, and it is declining for two reasons.

One, of course, is that some of the people who have been hopelessly in debt and were never going to make it are now being faced up to in the sense that they are either going through the foreclosure process or they are working out their problems.

The other thing that has happened is that there are a number of farmers who, because of large commodity payments, or because of declining production expenses, and other reasons, have very hefty incomes this year, and they are, in fact, paying down their debts. There is a substantial paydown of debt taking place, for example, in the commercial banking system.

The debt situation is somewhat improving, and the overall financial situation seems to be stabilizing. I don't want to paint that as a rosy picture because it would be improper, but we don't see a continuing deterioration; what we see is a stabilization of the situation.

Given the strong income in 1986, and the expected even higher income in 1987, there are a number of farmers who are now taking advantage of that to improve their financial status. So there is some modest improvement in the situation.

CUT IN TARGET PRICES

Senator GRASSLEY. Are you now going to address the issue of if we cut the target prices by 10 percent?

Mr. LEE. I am going to tell you, Senator Grassley, I don't know what the consequences of that are. We are waiting to see what comes out in the legislative proposals before we work that through because there are so many things that can affect it.

You may have some declining income from that source that can be offset by some strengthening in markets, and other things that happen. So one has to look at the whole package of legislative proposals and outcomes to come up with a definitive answer on that.

Obviously, there will be some reduction in the farm payment income, but we are also seeing now some stabilization and, hopefully, some strengthening in the export market. We will have to see how much those things offset each other.

Senator GRASSLEY. At the very least, a reduction of target prices of that consequence, and remember that it is not just for 1 year, but for each of the next 3 years, so that compounds pretty quickly, you know, to a higher percentage, is that going to contribute to the continuing falling land prices?

In other words, you are saying that they are stabilizing right now. Will that cause them to deteriorate?

Mr. LEE. We think, and obviously we don't know that for sure, Senator Grassley, but we think that the farmers and the people investing in land have looked ahead and have done some anticipating of a gradual decline over time. The current farm bill has some gradual decline in target prices. I think that people eventually feel that probably there will be some reduction in those payments down the road somewhere, and they are being very cautious about making long-term investments based on the current support prices.

We hear that all over the country, people are not only looking at today's situation, but they are making sure that they are not in a situation 5 years from now where they can't make their payments. We believe that there has been a substantial amount of discounting future expectations already. Certainly, if farm income were to decline precipitously, there would be further decline in land values.

BUDGET CUTS

Senator GRASSLEY. I would like to ask, Dr. Johnsrud, in regard to the proposal for the dramatic cut in the Extension Service, I have been told by my state that this would result in $1,185,000 less. It seems to me that this is so dramatic that it would be questionable to me that the Extension Service could even operate, would even be capable of carrying out any mission, particularly at a time when, in my state, the Extension Service has moved into a very major role in helping distressed farmers.

I guess I would like to know, No. 1, if you think, at that level of funding, there still is a mission that can be carried out by the Extension Service; and, No. 2, the extent to which you, as the administrator of the service, feel you can condone such cuts, if you have. I assume that you probably have, either out of political necessity or for some reason or other to go along, or you wouldn't be maintaining your current position.

Dr. JOHNSRUD. We are all facing some difficult budget situations, whether we are a farmer, running a business, operating an Extension Service, or trying to deal with the state or federal budget. This is something that affects us all.

I think that we need to keep in mind, Senator, that of that $69 million that is in that reduction, $57 million is in one specific program, and that is the Expanded Food and Nutrition Education Program [EFNEP]. This certainly is an important program, but it doesn't relate directly to the farm crisis situation that we have been talking about here. I think that brings our budget priorities into perspective a little bit more clearly.

It is not easy to run an organization of any kind with a reduction, and you have to make hard choices on what becomes very important to operate that organization. No; I am not going to say that it is easy, and some things are not going to be around any longer, and will not be a part of our program effort.

I think, as a part of this partnership, it has to be a state-by-state decision of what they are going to highlight and what they are not going to highlight. I wouldn't want to predict what Iowa would focus on where, obviously, the farm problem is very paramount.

Senator GRASSLEY. Right now this catches Iowa State University, as an example, which is now planning to develop a proposal for an experimental Extension Service delivery program, which we feel would lead the way to much improved, low cost extension technology transfer activities. I don't know whether you are aware of that. I guess I want to ask you. Are you aware of Iowa State University making these initial steps toward some innovative approaches of delivery at a lower dollar?

Dr. JOHNSRUD. Yes; I am aware that Iowa is headed in that direction. It is one of the innovative universities that steps forward in the area of technology transfer. I am not aware of the details. Those are some of the decisions we are going to have to make, how do we deliver this technology and educational effort in a more efficient manner.

Senator GRASSLEY. We happen to believe that that has been well received by USDA. If that is the case, it seems to me like, with this budget, it would not let the Extension Service survive long enough to make the transition to a lower cost service delivery structure, which, if it works well in Iowa, is going to be done elsewhere in the country, and help us to accomplish the overall purpose of the Extension Service at a lower dollar.

I don't know if it is a fair question, but they say that with this budget they are not going to be able to carry out that program, and to me that is bad. It seems to be a rationale, at least in this area, where we are trying to get more for the dollar, for not cutting further.

Dr. JOHNSRUD. I certainly agree with you that we would only have a desire to support those things financially with important dimensions of technology and educational transfer. As I indicated in my opening comments, we had to make tough decisions in building this budget. We do have an increased request in the 3(b) and (c) funds which give the option to the states to address these specific priority issues. This would at least provide an option to Iowa to continue that technology transfer effort.

Senator GRASSLEY. Mr. Chairman, I will submit three questions to the statistics service for answer in writing.

Senator BURDICK. Without objection.

Senator GRASSLEY. Thank you.

Senator BURDICK. Senator Harkin.

Senator HARKIN. Thank you, Mr. Chairman.

I would like to ask, Dr. Bentley, I see that what we have here is a cut in the Extension Service of 21 percent, and then you are asking for an increase in the National Agricultural Statistics Service. So you are cutting extension, but you want an increase the statistics service, my rough figure shows, by about 8 percent. Is that correct?

Dr. BENTLEY. I am not familiar with the figure. I will have to turn to the statistical reporting.

Mr. SHERMAN. It is around 8 percent.

EXTENSION NUTRITION EFFORTS

Senator HARKIN. So your priorities are to cut extension and increase the statistics service. Let me get into the extension end of it here for just a second.

Dr. Johnsrud, you just said that out of the $69 million cut, about $57 million comes out of the Expanded Food and Nutrition Education Program. That's what you just stated to Senator Grassley.

Dr. JOHNSRUD. Yes; that is correct, Senator.

Senator HARKIN. How much of that $57 million is a transfer from the Food Stamp Program?

Dr. JOHNSRUD. It is $38 million.

Senator HARKIN. Of the $57 million, $38 million comes from the Food Stamp Program?

Dr. JOHNSRUD. Yes, sir.

Senator HARKIN. Have there been any studies that you know of, Dr. Bentley, that have shown what the effectiveness has been of the Expanded Food and Nutrition Education Program?

Do you have studies that show that it just doesn't do anything, that it is a waste of money? What do you have?

Dr. BENTLEY. Generally over time, Senator, EFNEP has served a very useful purpose. It works hard to reach families.

Senator HARKIN. Especially in rural areas.

Dr. BENTLEY. Especially in rural areas, but also in small towns. The cost is high, as I mentioned. It has been in place for some time. I can't give the exact number of families being served. My colleague, Dr. Johnsrud, was asked that question, so I will turn to him for the numbers. It gets down to a matter of cost and budget restrictions when we talk about a lot of these programs.

I think that we need to give considerable emphasis to nutrition education as one of the major activities, and the Extension Service is now looking at this. I can reflect my bias very clearly, but my feeling is that nutrition education is important to farmers, particularly the livestock farmers and the poultry farmers, because we have to be talking about acceptability of the product and the changing demands that the consumer has these days with regard to livestock products. I must say that I am very pleased at the way the livestock industry is responding at this time, taking a look at this kind of issue.

Senator HARKIN. I appreciate that. I also feel that the Expanded Food and Nutrition Education Program has been very successful. Obviously, in my Subcommittee on Nutrition, we are going to be looking at that this year.

Again, it is the kind of thing where you try to cut another program that we are familiar with, that is not under your jurisdiction, the WIC Program, where we can show that for every dollar spent, we are saving money down the pike from reduced hospitalization, extended care, and that kind of thing.

I think that the same thing can be shown here. It is a high-cost program because it does reach very hard to get people in the rural areas and small towns as you just said. There is one other aspect of it which is not mentioned in your testimony, I wish you had, and that is the volunteer side of it.

Do volunteers work with this program?

EFNEP VOLUNTEERS

Dr. JOHNSRUD. Senator, we show about 107,000 volunteers that are involved in the Expanded Food and Nutrition Education Program.

You inquired about the number of families; there are approximately 290,000 families that are currently involved.

Senator HARKIN. You say that there are 290,000 families currently involved. How many volunteers?

Dr. JOHNSRUD. There are 107,000.

Senator HARKIN. You are saying that 290,000 families are receiving the program.

Dr. JOHNSRUD. That is correct.

Senator HARKIN. And there are 107,000 volunteers that work with the program, so that makes it about one for every two families. Have you factored in what the cost might be?

These are volunteers, and as I understand it, we are trying to get volunteers to help out in programs like this. This is one program that has proven to be effective at getting volunteers, and I don't know that this is being factored into this program.

Dr. JOHNSRUD. Senator, I need to round out the rest of the figures. In addition to the 290,000 families, there are approximately 590,000 youth that are involved, and many of these volunteers are working with the youth in that portion of the program. Also there are about 3,000 paraprofessionals, and some 400 professionals working with the program.

So while the volunteers are a large part and an important part, they are not the entire staff that works with this effort. But your point is well taken, the volunteers are very important.

Senator HARKIN. With 107,000 volunteers, that is one for every two families, that is not bad participation for volunteers.

Could you, just briefly, characterize, if you can, or if you want to submit it for the record that would be fine, the nutritional status of households before and after participation in the program? Do you have anything on that?

Dr. JOHNSRUD. Senator, I would prefer to submit that for the record so that we can have a correct and proper characterization.

Senator HARKIN. If we have any studies on that, I would like to have those.

Dr. JOHNSRUD. Yes; we can certainly provide those as well.

[The information follows:]

AN ASSESSMENT OF THE OBJECTIVES, IMPLEMENTATION AND EFFECTIVENESS OF THE ADULT EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM, FEBRUARY 1982

THE CONGRESSIONAL MANDATE AND STUDY PLAN

The Expanded Food and Nutrition Education Program (EFNEP) is administered by the Extension Service of the U.S. Department of Agriculture (USDA) and operates in the following way. Each State Extension Service receives an allocation of funds based primarily upon the proportion of national poor residing in that State. Each State, in turn, determines how services will be concentrated in its locales (usually counties) using poverty level criteria as a guide. Recipient locales hire indigenous personnel who are trained in principles of nutrition (food purchasing, food preparation and preservation, sanitation, etc.) and who work with low-income homemakers usually on a one-to-one basis in the home, in order to increase their knowledge of nutrition principles and practices and to enhance the dietary practices of the entire family.

On July 12, 1979, the Senate Appropriations Committee mandated an inquiry into the purposes and objectives of the Expanded Food and Nutrition Education Program (EFNEP) and a realistic evaluation of its accomplishments and effectiveness to date (Senate Report No. 96-246). In response to this mandate, which was comprised of some seventeen questions, the Program Analysis Staff of the Science and Education Administration's (SEA) Office of Joint Planning and Evaluation developed a study plan which was reviewed by Congressional and SEA staff prior to its implementation.*

Information pertinent to the mandated questions were collected by the following: (1) national level interviews documenting the different views of EFNEP goals, objectives and accomplishments; (2) study analyzing the allocation of funds and targeting of services; (3) literature review synthesizing available

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*Twenty percent of the program funds are used to support a youth program which, due to limitations of time and resources, was not included as part of this study.

Relationship of the Congressional Questions to the Study Modules

			Literature Synthesis		
Purposes and Objectives	National Interviews	Targeting of Funds and Services	Program Implementation	Comparative Analysis	State and Local Field Work
1. What is the goal and why? Is the goal the same today as it was when the program was first established?	✓				✓
2. Has each purpose been stated in such a way as to make it possible to develop quantitative measures of progress?	✓		✓		✓
3. Has agreement been reached among all parties as to the purposes of the program?	✓		✓		✓
4. What is the current extent of the problem? What measurements or indicators are used to describe the problem? What is the target audience and why? Should the target audience be shifted?	✓	✓	✓		✓
Program Evaluation					
1. What is the impact of the program on the resolution of nutrition problems? To what extent has the program met its objectives?	✓		✓		✓
2. What standards or criteria are used to measure the attainment of program objectives? How valid are these standards or criteria?	✓		✓		✓
3. What are the benefits achieved by each program's activities in each county?					✓
4. What is the cost-effectiveness or cost-benefit ratio for each program? How does this cost vary by State and by county? To what is this variation attributable?			✓		✓
5. What procedures have been used to establish that there is a cause-effect relationship between EFNEP program activities and the solution of nutrition problems?	✓		✓		✓
6. How does the effectiveness of EFNEP programs compare with the possible effectiveness of other methods of achieving nutrition education objectives such as food stamps, the women, infants, and children program, and nutrition education in the schools?	✓			✓	
7. What procedures are followed to insure that all relevant and current nutrition-related research is made available and considered in planning and implementing EFNEP program activities?	✓		✓		✓

EFNEP information and related documents; and (4) field work at the State and local levels documenting program goals, objectives, implementation and effectiveness. The relationship of the mandated questions to these four modules are indicated in Table 1.1 by a check mark.

THE FOUR STUDY MODULES

National Interviews Documenting the Different Views of EFNEP Goals, Objectives and Accomplishments

Interviews were conducted with 57 people who have Federal responsibilities and who were either involved with EFNEP in an administrative or public role, or involved with other nutrition education programs. In these interviews the following kinds of questions were addressed:

1. What are the goals and objectives of EFNEP and how have they changed, if at all, over the years?
2. What mechanisms exist to accomplish program objectives and what evidence would indicate accomplishments?
3. What evidence on program accomplishment have you and/or would you like to receive?
4. In your opinion, how satisfactory is the program as it is currently constituted and how might it be improved?

The results of these interviews were used in combination with other information to focus issues addressed in other modules of the study and to develop a simplified schematic of the way the program operates.

Study Analyzing the Targeting of Funds and Services

This study examined the ways in which funds are currently allocated to States and counties, and how this process might be modified using different data sources, allocation formulae and indicators of "need"

A comprehensive data base that encompasses county-level information was assembled. This data base contains the following kinds of information: demographic measures from the 1970 Census such as the number and percent of low-income families in each county; county level participation in the Food Stamp, Women, Infants and Children (WIC) and Nutrition Education and Training in Schools (NET) programs; nature and extent of participation in EFNEP including the direct and in-kind support that State and local sites give to the program; and, health/nutrition-related vital statistics.

Literature Review Synthesizing Available EFNEP Information and Related Documents

This module entailed a survey and synthesis of existing literature and other documents pertaining to two major concerns: (1) the nature of evidence pertaining to the way the program has been or might be implemented; and, (2) the way the program operates as compared with some other Federally funded nutrition education programs.

Field Work at State and Local Levels Documenting EFNEP Goals, Objectives, Implementation and Effectiveness

In this module information was collected in a selected set of States and local sites concerning the goals and objectives of the program, program operations and the benefits families derive from participation. This module was by far the largest in terms of study resources and was conducted under contractual arrangement with InterAmerica Research, Inc., a minority-owned firm with extensive experience in conducting studies with low-income and minority populations.

An initial set of interview questions was developed by SEA staff on the basis of the mandate and the results of the national-level interviews. They were reviewed and revised by persons knowledgeable about the program or about nutrition education and were then given to InterAmerica to field test and revise on the basis of field test results. During the Fall InterAmerica had their interview teams working in nine States and 36 local sites across the country.* Six of these States were selected at random based on the amount of EFNEP funds they received. Thirty local sites were randomly selected based on their number of participating families. Three additional States, each with two sites were selected to review as examples of successful EFENP programs. In each State, State and local EFNEP staff were interviewed to ascertain the way they conduct the program. A sample of participating families were interviewed to learn of the benefits they derive from their participation. The teams also interviewed a sample of families who had been graduated from the program and with another sample of families who were eligible to participate but had not yet had the benefit of such participation. Further, the interviewers obtained a limited amount of information from the files on the participating families. State and local nutrition and social service personnel were interviewed to understand their relationship with EFNEP. [A total of nearly 2,000 interviews were conducted.] Another aspect of the field work involved a limited number of case studies of programs that are of special interest because they represent some unusual aspect of the program or adaptation of the program. Examples are the effects of discontinuing or starting up the program in a particular site, adaptation to the needs of special groups (e.g., migrants, native Americans, etc.), dramatic side benefits or secondary effects of program participation, generating additional funds from non-EFNEP sources, etc.

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*The interviewers were especially hired and trained for purposes of the study. Many of the interviewers had prior experience working with low-income families. An attempt was made to balance the teams ethnically to match the communities in which they were working.

Interaction With Concerned Parties

An advisory group was formed for the purpose of advising on procedural and substantive matters associated with the conduct of the study. It was comprised of representatives from different operating levels of EFNEP, the Office of the Secretary, the Office of Management and Budget, and public participation groups. Throughout the study a series of briefings on study progress was held with concerned parties (e.g., Directors of Extension and SEA and Congressional staff) and advice and critical comments were sought from evaluators, nutritionists and nutrition education researchers, with adjustments being made in the study design based upon their comments.

In the paragraphs that follow, the answers to the Congressional questions as well as to other questions that were necessary to round out the study, are presented in a question and answer format.*

THE STUDY RESULTS

What Is or Was the Nature of the Problem and What Measurements Are Used to Describe It?

In recognition of the fact that there was hunger and malnutrition in the U.S. and at the same time agricultural surpluses, efforts were begun in the mid-1930's to ameliorate this problem by redistributing food (commodity distribution) or providing the means to acquire food (food stamps). In the 1960's hunger and malnutrition again became a concern when it was noted that: (1) inadequate food consumption patterns were much more likely to be found among low-income families; (2) there were many such families; and (3) children and adults in many of these families were found to be suffering from inadequate nutrition and in some instances, severe malnutrition as evidenced by clinical observations.

What Efforts Have Been Made to Alleviate the Problem?

In response to these problems Congress introduced legislative changes which had the effect of expanding the Food Stamp program to more people, replaced the commodity distribution program with the Food Stamp program, instituted school lunch and breakfast programs, and provided special supplemental feeding assistance to needy pregnant women or new mothers and their children. The combined effect of these programs resulted in many millions of families and their children being served (in 1980 about 20 million persons participated in Food Stamps, 1.3 million in the Women, Infants and Children (WIC) program, and nearly 90% of all school age children had access to school feeding programs).

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*See "An Assessment of the Objectives, Implementation and Effectiveness of the Adult Expanded Food and Nutrition Education Program: Technical Summary", ES, S&E, USDA, Washington, D.C., December, 1981.

In addition to programs that enhance access to food more modest efforts were also initiated to educate people about nutritional principles and practices. These included EFNEP, WIC and Food Stamp educational efforts and the Nutrition Education and Training in the Schools (NET) program.

What is The Current Extent of the Problem? and What Efforts Can Be Made To Alleviate It?

A team of physicians, retracing steps taken ten years earlier found far fewer grossly malnourished people than during their initial visit in the late 1960's. They concluded that while many problems of the poor remained and even though the need for additional food could be documented in some cases, their need for food had been met and this improvement was reflected in the health of both children and adults. However, deficiencies remained for nutrient groups such as calcium, vitamin B-6 and iron (among women) with these deficiencies being greatest for low-income households. Recent concern has focused not only on deficiencies but on over-consumption accompanied by obesity and its correlated health problems. Central to this latter concern is the need for a better understanding of the role of foods and specific nutrients in maintaining health for different segments of the population who may have very different nutritional requirements. To ameliorate these problems (specific deficiencies and over-consumption) it has been recommended that greater emphasis be given to nutrition education to help people make food choices resulting in sound diets and good health. Among these are increased efforts to meet the special needs of specific groups (e.g. low-income, pregnant women, children, adolescents, elderly, etc.), greater dissemination of nutrition information through public media, and greater involvement of trained nutritionists by other health professionals (e.g., physicians, dentists, nurses, public health workers, etc.).

What Are the Origins of EFNEP, Its Scope and Current Operations?

EFNEP was an outgrowth of a number of pilot projects initiated by the Extension Service in the early 1960's in an attempt to better meet the needs of homemakers who were more difficult to reach through its traditional approaches.

Having demonstrated the feasibility of hiring and training indigenous personnel to work intensively with homemakers on a one-to-one basis or in small groups to improve their diet related skills and practices, the program was initiated on a large scale by USDA under the auspices of the Extension Service, in 1969. The program reached a funding plateau of about 50 million dollars in 1972 and has remained at about that level. As a consequence the effects of inflation have significantly reduced the number of eligible participants that can be served. A typical aide works with about 53 families visiting each once or twice a month in individual or small group settings. In 1980 some 3600 aides served about 2.75 million families (plus another better than half a million youth) in over 900 locales throughout the U.S. and Puerto Rico.

What is the Goal and Why? Is it the Same Today as When the Program Was First Established?

The stated goal of EFNEP is, "To help low-income families, especially those with young children to acquire the knowledge, skills, attitudes, and the changed behavior necessary to improve their diets in normal nutrition". The goal for the program grew out of considerations cited earlier (the nature of the problem and the origin of EFNEP). The views of the goal of the program as evidenced by most of the personnel at the national, state and local levels were consistent with this statement (about 80% overall) but, some emphasized different aspects than others (e.g., education versus behavior change). However, even those who emphasized the educative functions of the program thought that it should be judged on how it changed dietary practices. More than two-thirds of the persons interviewed thought the goal had remained the same and for those who thought there had been some change, there was little agreement as to the nature of this change.

Has Agreement Been Reached Among All Parties As to the Purposes of EFNEP?, and Has Each Purpose Been Stated In Such A Way As to Make It Possible To Develop Quantitative Measures of Progress?

As noted earlier most everyone agreed that EFNEP should be judged primarily on how it affects changes in dietary practices. Of course, this does not preclude judgements about how EFNEP also affects knowledge acquisition, attitude change and other events.

As a routine measure of progress each aide collects information periodically, via the 24 hour recall, on the homemaker's dietary intake. [These results are aggregated to the national level and are regarded as an indicator of overall program progress.] In addition, all aides have some kind of a check list that they can use as a guide in assessing their progress in other areas in which they work with homemakers (e.g., sanitation, food purchasing, food storage and preparation, etc.). These two sources of information form the Progression Model which is to be used as a guide by the aide in determining homemaker progress, areas that need emphasis, and homemaker completion of the program. Approximate standards of attainment are indicated in this Progression Model. This information was cited most frequently by State and local personnel as being acceptable measures of program progress. The next most frequently cited were formal knowledge tests and informal behavioral indicators. Finally, another source of information on program accomplishments is obtained via program reviews. About half of the nine States and thirty-six sites included in the study had been reviewed by the national office within the past three years. [The frequency with which each State reviewed its own sites was not determined.]

What are the Difficulties Facing the Program in Meeting Its Objectives?

When asked about the nature of problems incountered by EFNEP in meeting its objectives, both national interviewees and State/local Extension Staff cited funding problems as being a major concern. While both groups see funding as a problem, national level personnel placed a higher priority on problems centered around program design (e.g., cost-effectiveness of the one-on-one approach, use of the 2-2-4-4 food groups, etc.).

What is the Logic Underlying the Implementation of EFNEP? and What is the Nature of the Evidence Supporting the Underlying Assumptions?

Based upon an examination of the legislation, program guidelines, program files and the results of the national level interviews an attempt was made to specify the logical model or models that people employ in thinking about the way EFNEP operates. A single logical model was found to encompass all the different viewpoints as to what EFNEP is trying to accomplish. Essentially a causal chain of events, from more immediate program activities and benefits to longer term effects of these benefits and secondary benefits, were identified. It was apparent from the schematic developed that where one placed the emphasis in this causal chain would profoundly affect the judgement one would make about program effects (e.g., knowledge and attitude change, change in dietary practice, change in other family members' dietary practices, improved health, etc.). Literature could not be found which was relevant to the use in EFNEP of the paradigm that knowledge leads to attitude change which in turn leads to change in dietary practices. The literature that was available suggested that knowledge and attitudes might be considered equally powerful in bringing about change in dietary practice. No literature was found that pertained to the assumption that the use of indigenous paraprofessional aides was superior to the use of other kinds of personnel in providing nutrition education. However, literature could be found which documented the existence of many other causal linkages even though some of the studies had serious methodological inadequacies.

How Are Funds Currently Allocated to the States? and How Effective Are These Procedures in Getting Funds to States With the Greatest Need?

Ten percent of the sums appropriated for EFNEP are divided equally among the 50 States and Puerto Rico. The remainder is apportioned on the basis of the percent of the U.S. poor residing in each State, using 1960 and 1970 Census information. As a result there is a very high degree of relationship between the amount of funds a State receives and its percent of national poor in 1970. In turn, States with high concentrations of low-income families when compared with other States, were found to have higher mortality rates, greater participation in different assistance programs, less wealth, greater proportions of their population were youth and lower proportions of their youth were living with both parents.

How Do States Focus EFNEP Activities in Their Counties?, What Contributions Do States and Locals Make to the Program? and What Role Does this Contribution Play in Determining Where Services Are Located?

The selection of counties in which they are to offer services is left to the option of the States with the understanding that they are to use poverty criteria as a guide in their selection. All of the nine States included in the survey indicated that they used low-income density as one criterion and in addition used such criteria as local government request, other agency recommendations and the availablity of qualified staff. Still another consideration that was discovered to play a role in the number and location of EFNEP sites was the amount of State and local contributions that were made to the program. Overall it was found that, although not required to do so, the

States and their local units provide about the dollar equivalent of half again that of the Federal dollar (viz. about 50¢ for every Federal dollar) in direct (salaries paid from other sources) and in-kind (administrative and physical services provided without charge) contribution to the total EFNEP program (adult and youth combined). [About half of this contribution is realized from volunteer time, especially to the Youth portion of the program.] When States were ranked by their percent of low-income families it was found that States with the lowest concentrations of national poor relative to their total populations made the greatest relative contributions while States who were highest in this regard made the lowest contributions.

How Do Counties That Currently Have or Formerly Had EFNEP Differ From Those That Never Had EFNEP in Terms of Different Indicators of Need? and To What Extent Are Certain Program Activities Concentrated in Counties Where the Need For Such Activities is Greatest?

When counties that had EFNEP (either currently or formerly) were compared with those that had never had EFNEP, it was found that EFNEP counties were more likely to: have the largest numbers of people at all income levels*; have greater numbers of households participating in the Food Stamp program+ and receiving other forms of public assistance*+; have a WIC# and a NET# program; have high infant and total mortality rates*, have proportionately more young children (under 5)* and, have proportionately fewer children (under 18) living with both parents*. Other analyses showed that counties that ranked high on one indicator of need tended to also rank high on other indicators of need.

When counties were ranked by their proportion of poverty level families (using the 1970 census) a marked trend was noted for the higher poverty level counties to have EFNEP and WIC programs. However, in terms of program participants, there was a dramatic tendency for the percent of program participants in a county to increase, for EFNEP, WIC and Food Stamps, as the proportion of poor families in a county increased.

How Do Counties Focus Services in their Different Locales? and What Are Peoples' Views As to the Appropriateness of Those Currently Served and Others That Might Be Served?

According to the guidelines local EFNEP units are to focus services on homemakers with young children who are eligible for USDA food assistance programs and who are receiving welfare assistance. In the 36 Sites included in this study, homemakers were found to be one-third white with the remainder being minority group members (Blacks and Hispanics in that order); likely to have low educational levels (about one-fourth had an eighth grade education or less while another 65 percent had at least some years of high school); likely to have very low income levels (more than three-fourths had incomes of less than $516 per month); likely to be Food Stamp participants (61 percent), WIC participants (45 percent) and Welfare participants (45 percent); and, are highly likely to have at least one child (88 percent). Almost everyone felt that EFNEP was serving the appropriate groups (90% at the State and local level and 2/3 at the national level) and that if other groups were to be served they should be (in order): the elderly, special need groups (adult households and institutionalized populations, pregnant teenagers, Indians, handicapped, etc.), and all economic groups.

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*Using 1970 Census information.

+Using FY '79 Food Stamp participation information.

#Using FY '79 WIC or NET participation information.

What Are Possible Alternative Ways of Targeting Funds and Services? and What Do We Know About Their Possible Effects?

The Changes tried and their possible effects are:

Change Introduced	Results Observed
1. Elimination of the 10% State set-aside.	States with large numbers of U.S. poor would gain but the amounts they receive would be small relative to the amounts they now receive, even though their new additional amounts might be of the magnitude of the total allocation for several States combined. States that now receive the smallest amounts of funds would be especially hard hit even though they might have high proportions of poor within their own boundaries.
2. Use 1970 Census information exclusively rather than both 1960 and 1970 Census information.	States with smaller proportions of the nation's poor or large States, if they have large amounts of poverty would benefit most.
3. Use some other poverty level (e.g., .75 or 1.25 percent of poverty) rather than the current one (1.00 percent) to make allocations.	Partly because counties with high numbers of poverty level families tend to be the largest counties in population at almost all levels of income, changing the criterion level of program placement from 1.0 to 1.25 or .75 of poverty would probably have little effect on the location of EFNEP sites. The same counties that currently provide EFNEP services would still be prime candidates for EFNEP. Further, as EFNEP sites are phased out, the trend is to remain in the sites that have the greatest numbers of low-income families and it is in these latter counties where this shift would make the least difference.

4. Use other measures of need as a criterion:	
(a) Food Stamp Participation rates	Food Stamp participation rates are related to other measures of need but are not an improvement over other poverty measures.
(b) Health Status	Related to other measures of need but severely out of date in terms of health changes that have occurred
5. Allocate funds directly to the counties rather than the states (using the current set-aside and percent of U.S. poor formula).	The funds would be spread too thin to conduct a viable program in most counties. Urban counties and States with many counties would benefit most. Flexibility in following population shifts (by closing out some sites and starting up others) or in concentrating services (e.g., a pocket of poverty in a wealthy county) would be lost.

What is the Training, Background and Experience of Those Who Administer EFNEP and How Much Time Do They Spend on EFNEP Activities?

The majority of all State and local EFNEP professional personnel have been associated with the program since its inception. Over three-fourths of the State EFNEP staff (adult program) hold degrees in Nutrition while many of the other EFNEP staff report completing coursework in Nutrition or hold degrees in Home Economics. The amount of time spent on program activities varies from an average of 3/4 time for the State EFNEP Director through 60% for the local Supervising Home Economist and half-time for the State Nutritionist to 5% for the State Extension Director. The nature of their involvement ranges from substantive program activities for the former to primarily budget concerns for the latter.

What Is the Background, Training and Experience of Program Aides and How Much Time Do they Spend on Their Various Activities?

Aides tend to be trained primarily in nutritional principles and food management practices (e.g., purchase, planning, preparation, storage, etc.) by their Supervising Home Economist working in cooperation with the State EFNEP Director and experienced aides, using materials provided by the State EFNEP office (other sources cited were the National EFNEP offices, self- designed, other State offices, businesses, local professionals, and private consumer groups). The majority of aides have been with the program four years or more (40% for more than nine years and another 30% between four and nine years); work full time (64% work 35 hours or more per week), 62% are minority group members, 12% have an eighth grade education or less. The average aide is 14 years older than the current program participant (the average aide is 47 years of age) and their weight for height is generally the same as that of program participants (high but close to that of a socially and ethnically matched population). A typical aide spends her time as follows: teaching, 46%; recruiting and record keeping, about 11% each; lesson preparation, 10%; travel and receiving training, about 9% each; with the remainder spent on miscellaneous activities - however, there was wide variability for some of these activity areas. Door-to-door canvassing by the aide still remains the primary means by which families are recruited into the program. However, referrals from other programs have increased by 140% for recent program entrants (currently 24%, formerly about 10%).

To What Extent and In What Ways Does EFNEP Cooperate With Other Assistance Programs?

The primary means by which EFNEP cooperates with other assistance programs is through referrals (other means cited were to provide program support and serving on advisory boards). Referral rates out of EFNEP to other programs were two to four times higher than were referrals to EFNEP. Out referrals cited most frequently were for health provisions and to other Extension programs (including Youth EFNEP). Recent entrants to the program, when compared with those who have been participating a while or have graduated from the program, report a high incidence of referrals to EFNEP from Food Stamps, Welfare & Health Agencies and a lower incidence of referrals to Youth EFNEP and other Extension programs - a change probably brought about in part by the recent emphasis on reaching greater numbers of Food Stamp participants.

How Are Instructional Materials Developed? and, What Procedures Are Followed To Insure That All Relevant And Current Nutrition Related Research Is Made Available and Considered in Planning and Implememting EFNEP Activities?

Instructional materials used by the aides with program families are developed primarily by the State Extension Office and the National EFNEP Extension Office. In addition some materials are self designed by the Supervising Home Economist and the State EFNEP Nutritionists. In the development of these latter kinds of materials, government publications were the most frequently cited sources. All of the State EFNEP Nutritionists indicated that they tested materials used in the program using, at times, criteria of effectiveness and popularity, but never national standards or according to other tested materials. The preferred methods of ethnic adaptation of materials were through the observation of cultural factors, use of bilingual materials and training of aides. Least preferred was the ethnic matching of aides with families.

The State EFNEP Nutritionist is responsible for reviewing nutrition materials for use in EFNEP and for identifying current trends to update materials, as well as adopting and preparing nutrition education materials. As a way of getting at how current information and materials were made available to EFNEP, the frequency of contact and purpose of contact with the State EFNEP Nutritionists by other State and Local EFNEP personnel were examined. Eighty-nine percent of all State EFNEP Directors and 83% of all local EFNEP Directors reported that they maintained contact with the State Nutritionist for educational materials, content information and training assistance (in roughly that order of frequency).

Why Do Homemakers Enroll in the Program?, When and Why Do Homemakers Leave the Program Early?, and How Do They Differ From Those Who Stay?

Families who elect to enroll in EFNEP, when compared with those who decline are those who have the time to get involved, the desire and need to do so, and the accessibility to do so (as reported by local staff). Of the homemakers who leave the program before completion (some 25% overall with local sites ranging from a low of 2% to a high of 79%), one-fourth do so during the first six months of participation with another 15-20% leaving in each of the subsequent six month periods. Reasons given for leaving early were: returned to work, moved, or no longer had the time or interest. Those who left when compared with their classmates tended to be younger, white or Hispanic, have less education and lower monthly income, come from rural areas and participate less in the WIC program. They did not differ appreciably in their dietary practices (24-hour dietary recall) when they started in the program.

What Standards or Criteria Are Used To Measure the Attainment of Program Objectives? How Valid Are These Standards or Criteria? What is the Impact of the Program on the Resolution of Nutrition Problems? To What Extent Has the Program Met Its Objectives

To gauge the progress of individual homemakers the program prescribes the Progression Model which is comprised of a 24-hour dietary recall and a checklist of behaviors pertaining to food practices. Through periodic administrations of these instruments the aide can gauge homemaker progress and areas that need emphasis. For purposes of this study the following kinds of information were collected by interviewers who were especially hired and trained for such purposes: knowledge about food and nutrition (e.g. knowledge of proper food storage practices, food as sources of different nutrients, etc.), food budgeting and shopping practices, amount of food grown at home and, dietary practices via a 24-hour recall and frequency of consumption of different food groups over a 3 month period of time. Analysis of this information showed that individual homemakers improved with regard to their: food and nutritional knowledge; food shopping and budgeting practices, dietary practices (as indicated by the 24-hour recall with most of the improvement occurring in the fruits and vegetables and, breads and cereals group); amount of food grown at home and amount of budget spent on food (less with more time spent in the program). Most of these improvements reached a plateau after about 12 to 18 months of participation, and though seldom large, were sizeable enough to be of practical significance. Homemakers were found to benefit in different ways from their participation (viz. not equally in all areas) with these benefits persisting after completion of the program. Homemakers reported improved dietary practices by their children with most of the improvement occurring in the breads/cereals and fruit/vegetables food groups (these improved practices were also reported by graduates for their children). Almost all participants found their participation useful even though many remained overweight or underweight when compared to weight for height standards. Other analyses showed: that the 24-hour recall was not a good indicator of more habitual dietary practices of individual homemakers and was probably a weak measure of program attainment as well; and, that one-on-one instruction remains the most widely used instructional approach. Almost all of the program participants and graduates (98% or more) thought it was a good way to learn but they would like to see more demonstrations and tips added to the lessons.

What Are the Benefits Achieved By Each Program's Activities In Each County?

Analysis showed that for the learning experienced by their homemakers, local units vary to a considerable extent for food knowledge and food practices, to a substantial extent for dietary practices and virtually not at all for percent of income spent on food and percent of food homegrown. Further, very small relationships were observed among these different areas indicating that local site success is multidimensional with success in one area having very little to do with success in other areas.

What Is the Cost-Effectiveness or Cost-Benefit Ratio For Each Program? How Does This Cost Vary by State and by County? To What is This Variation Attributable?

A large number of variables were examined, singly and in combination, to determine the extent to which they were related to differential performance of the sites on the outcome measures. Cost related variables were included as well as other variables related to supervision, training, characteristics of the homemakers and the aides, interagency cooperation, state of the records, etc. Neither substantial nor meaningful relationships were discerned. At times the absence of a relationship was noted where one was to be expected. For example, an index indicating how well records were maintained at each site was not found to be related to any of the site success measures. Further, the sites within a State were not consistently high or low on any of the success measures. Instead, each State had some high sites and some low sites. As a consequence it was concluded that knowing the State in which an EFNEP unit is located tells one nothing about the relative effectiveness of the site. On the basis of the results of other evaluation studies it was conjectured that differential site success might be attributable to the manner in which a set of planning and management activities are carried out by the local unit supervisor with their conduct not being discernible through the usual questionnaire and interview techniques.

How Does The Effectiveness of EFNEP Programs Compare With The Possible Effectiveness Of Other Methods of Achieving Nutrition Education Objectives Such As Food Stamps (FS), The Women, Infants and Children Programs (WIC) And Nutrition Education In the Schools (NET)?

This question was addressed in three ways: (1) by asking individuals at the national level their perceptions of the relative effectiveness of these different programs; (2) by conducting a very thorough comparative analysis and synthesis of a number of USDA nutrition education activities; and, (3) an analysis of how FS and WIC participants who are also in EFNEP, benefit from their participation.

Many of the national level interviewees (37%) thought that no one program had a greater likelihood of success than another but rather there should be linkages and interactions among the programs. Another 22% thought that WIC had the greatest likelihood of success because pregnant women are motivated out of their desire to have a healthy baby and because the program has a food package. Other respondents indicated that they didn't know (20%) or chose NET (14%) or EFNEP (12%).

The comparative study examined six program areas of nutrition education activity with regard to the following categories: similarity of objectives; the way nutrition information is provided; requirements for program participation; the number of eligible participants reached and their background characteristics (ethnic and regional membership); levels and trends in funding; and, the nutrition education impact of their activities. The six programs for which reviews were conducted are: the Expanded Food and Nutrition Education Program (EFNEP) - both the Adult and Youth Components; the General Food and Nutrition Program of the Extension Service; the Extension 4-H Food and Nutrition Program; the Food Stamp Program (FSP); the Nutrition and Education in the Schools Program (NET); and, the WIC Program - both the Adult and Youth Components. The results showed that all six programs share two basic nutrition education objectives: (1) provision of information on nutritional value of foods; and, (2) provision of information on food management skills. However, while each program strives to meet these nutrition education objectives, each program differs in its methods, activities, emphasis and/or resources. Further, with regard to the impact of some of these programs very little is known in an absolute sense and even less about one relative to the others. EFENP has completed five studies; 4-H has completed two; NET has completed one and WIC has two in progress. In addition to the small number, all vary in scope and purpose which limits comparisons across studies. Finally, the variations in program services, staff, resources, the nature of the records that are kept and the manner in which they are kept place definite constraints on the relative comparison of the different program outcomes. As a consequence no definite conclusions can be reached about the effectiveness of ENFEP versus other nutrition education activities.

Finally we can view the efforts of these programs as being complementary rather than competitive by examining how EFNEP participants who are also participating in the FS or in the WIC program differ from those who are not participating in such programs in terms of the progress they manifest. Results of these analyses showed that where differences were observed they tended to favor WIC over non-WIC participants (viz. on food practices, dietary recall, and percent of food homegrown). Results for FS participants were not as pronounced (except for percent of income spent on food) nor were they consistent enough across the different homemaker groups to lend themselves to some kind of generalization. Children of WIC and of FS participants showed more dietary improvement than did children of non-participants, however, these differences were not statistically significant.

What Can Be Learned From Variations in the Way EFNEP Is Currently Implemented?

A series of case studies were conducted of sites which were judged to be worthy of study in some detail because they might give some indication of unusual flexibility and/or effectiveness in the way the program is carried out.

The results showed that: through the use of indigenous paraprofessionals the program can be adapted to meet the needs of groups as diverse as Native Americans residing on reservations to migratory farm workers (the latter with considerable administrative difficulty); with the assistance of specific State legislation, the program can be implemented in conjunction with other nutrition activities so as to decrease duplication of services, sharpen the focus on the most needy and improve the impact of the program on participating families; also, by emphasizing individual accomplishment and the availability of employment, education and training programs, EFNEP can emphasize self-development with the result that many homemakers manifest greater social participation including the acquisition of additional skills and employment; and finally, temporary terminations of the program in one or more sites, may be utilized as an opportunity for reassessment and restructuring of the program in ways that might improve its efficiency and effectiveness.

By What Means Is Or Might Instruction Be Provided and What Are People's Views As to Their Actual or Potential Effectiveness?

The most frequently used method of instruction, most publicized for effectiveness, most criticized for inefficiency, yet popular with the program participants is the one-on-one method of instruction. When asked about alternatives to the one-on-one method, Extension staff indicated that small group meetings and large group meetings were considered to be the most and least effective alternatives respectively. Mass media and television were regarded as the second and third most effective alternatives. Homemakers indicated that they were likely to attend group meetings (84% or more), watch TV programs (83%), listen to radio programs (56% or more) and read newspaper articles (80%) about nutrition. However there was no evidence to suggest that they would actually do so (newspapers and magazines observable in the home, nature of TV programs being watched during the interview etc.).

Are There Ways In Which EFNEP Might Be Conducted Which Could Improve It's Efficiency and Effectiveness?

To address this question the results of 16 demonstration projects designed to use innovative methods to increase the number of Food Stamp participants reached by EFNEP were examined. These projects utilized a wide variety of ways of recruiting families and of providing them with services. For example recruiting strategies included the use of media, personal contacts of different kinds and in different settings (e.g stores, drop-in centers, intact groups, etc.), and inserts to food stamp certificates. In addition to the one-on-one, other means of providing services included presentations/demonstrations, small groups, mail, phone, and shortened and improved curricula. The results showed that: (1) States and local sites can devise practices which they consider different from what they do routinely which can enhance the efficiency, effectiveness and even cost/effectiveness of their activities; (2) the effectiveness of different combinations of practices will vary with the context in which they are implemented; and, (3) attrition is a serious problem for all means of providing services but apparently much more so for media than for more personalized efforts.

SUMMARY

In brief these results show that:

- in response to concerns about hunger and malnutrition among low-income families in the U.S. during the 1960's, activities were expanded that enhanced access to food and improved knowledge about sound nutritional principles and practices.
- currently, (circa 1980) problems of hunger have abated while problems of imbalances in consumption, including overconsumption, remain,
    - the alleviation of such problems requires a greater emphasis on a knowledge of sound nutritional principles and practices than does the alleviation of hunger.

- EFNEP was initiated during the late 1960's as a means of helping low-income families acquire the knowledge, skills, attitudes and changed behavior necessary to improve their diets in normal nutrition
    - this goal has remained the same since the inception of EFNEP and is shared by most persons associated with it
        - such persons also feel that if the program is to be judged on any single accomplishment it should be the extent to which it improves dietary practices
        - problems in loss of program purchasing power (near level funding combined with inflation) and program design (e.g. undue reliance on: the one-on-one instructional approach, the 2-2-4-4 food groups, etc.) were cited as important impediments to the accomplishment of the program goal
    - the national office prescribes approximate standards for participant attainment and completion and collects information routinely on participant improvement in dietary practices as well as other participant information
        - the utility of this information for indicating homemaker's more habitual dietary practices and for indicating homemaker progress were considered weak, at best
        - the utility of this information for indicating local unit program impact, even when maintained conscientiously, was not evident
    - empirical support was not found in the literature for the assumption that indigenous paraprofessional aides were superior to non-indigenous para-professionals and professional personnel in providing nutrition education (the absence of such evidence should not be construed to mean that the assumption is invalid),
        - support in the literature was found for other causal assumptions in EFNEP implementation although the supporting evidence had, at times, methodological limitations.
- EFNEP has been and continues to be effective in targeting funds and services in areas of greatest need and to many needy families, who are judged by associated personnel to be the most appropriate recipients of such services,

  - although not required to do so States and local units contribute about fifty cents for every Federal dollar received, in direct and in-kind services,
  - no beneficial effects of altering current procedures for allocating funds were discerned.
- appropriate types and amounts of training and experience were evident on the part of EFNEP staff as was the amount of time given to supervision and management.
- EFNEP cooperates with other assistance programs primarily through referrals.
  - referrals from other programs (e.g. Food Stamps, and WIC) have increased dramatically recently (circa 1980).
- instructional materials are developed primarily by the State and National Extension Offices, usually working in close cooperation,
  - the State EFNEP Nutritionists appear to be heavily involved in this process.
- some local sites experience a high percentage of homemaker dropout before program completion.
- homemakers who remain in the program show improvement with regard to their food and nutritional knowledge, skills and practices,
  - such improvement reaches a plateau after 12 to 18 months of participation with different homemakers benefitting to different degrees in different areas (e.g. knowledge, consumption, budgeting, etc.),
  - homemakers reported improved dietary practices for their children,
  - benefits derived from participation persist after completion of the program.
- local sites were found to be differentially effective, however, those that were more effective in one area (e.g., knowledge acquired) were not necessarily more effective in another, different area (e.g., improved dietary practices).
  - causal factors that might explain differential site success were not isolated perhaps because they are less tangible and hence less identifiable through the usual questionnaire and interview techniques.

- evidence was not available on the relative effectiveness of EFNEP versus other nutrition education programs,
    - among EFNEP participants trends were observed for WIC participants to fare better than non-WIC participants and for the children of WIC and FS particpants to fare better than those of non-participants.
- states and local sites can devise practices and adapt the program in ways that are different from what they routinely do which can enhance the efficiency, effectiveness and cost/effectiveness of their activities.

Recommendations for program improvement include the following:

- In selected trial sites practices designed to enhance the cost-effectiveness and efficiency of the program (e.g. different combinations of media, individual and group instruction) should be systematically introduced and their effects assessed using acceptable evaluation procedures.
    - In such sites, the administrative guidelines should be waived to the extent necessary (they currently require that at least 70% of of programs funds be spent on paraprofessional salaries), evaluation activities should be supported by an increment of up to 10% of existing program funds, with the results being shared with other sites so that they can redesign and assess the effects of their restructured program activities.
    - During this period of transition to greater cost-effectiveness, appropriate indicators of progress would be the cost-effectiveness of activities in trial sites and the rate at which sites are converted to greater cost-effectiveness, rather than overall program impact.
- The basic four food group paradigm should be reexamined with regard to:
    - The number of groups to be used
    - The emphasis to be given to imbalances in consumption and control of total caloric intake
    - How best to emphasize the role of energy expenditure in maintaining desirable weight while at the same time allowing enough food to be eaten so that needed nutrients can be obtained.

- A core curriculum should be developed which encompasses concepts of mastery of its different instructional areas and completion of the basic program.

- Practices should be encouraged which facilitate serving greater numbers of participants in the FS and WIC programs.

- The current record system should be re-examined with regard to its objectives, purposes and content, frequency and accuracy of maintenance required, with a view towards simplifying and streamlining the entire process.

- Efficiencies in the program as it currently exists can be made in the following ways:
  - the period of instruction can be shortened
  - in sites that have high dropout rates, these rates can be reduced by allowing aides to work more intensively over a shorter time period with their families
  - aide time spent on door-to-door recruiting, record-keeping, travel and perhaps training might be reduced
  - States should perform program reviews of their own sites with greater frequency and rigor.

For more information about this study call (703) 235-3168 or write to:

Program Development, Evaluation and Management
Systems Staff
Extension Service
Science and Education
U.S. Department of Agriculture
Washington, D.C. 20250

AN ASSESSMENT OF THE OBJECTIVES AND IMPLEMENTATION OF THE 4-H EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM, APRIL 1982

THE CONGRESSIONAL REQUEST AND STUDY PLAN

The Expanded Food and Nutrition Education Program (EFNEP) is administered by the Extension Service of the U.S. Department of Agriculture (USDA) and operates in the following way. Each State Cooperative Extension Service receives an allocation of funds based primarily upon the proportion of national poor residing in that State.* Each State, in turn, determines how services will be concentrated in its locales (usually counties) using poverty level criteria as a guide. Recipient locales hire indigenous personnel who are trained in principles of nutrition (food purchasing, food preparation and preservation, sanitation, etc.) and who work with adult low-income homemakers usually on a one-to-one basis in the home, in order to increase their knowledge of nutrition principles and practices and to enhance the dietary practices of the entire family. A fixed percentage of each State's allocation (currently approximately twenty percent) is used to provide activities to low-income youth, primarily from urban areas. These activities are administered by 4-H. Objectives of 4-H EFNEP are to:

- Provide education for youth in the principles of nutrition and diets and in the acquisition and use of appropriate foods;
- Contribute to the personal development of low-income youth through improved nutrition; and
- Contribute to the improvement of diets and nutrition of the total family by means of education programs for youth.

On July 12, 1979, the Senate Appropriations committee mandated an inquiry into the purposes and objectives of the Expanded Food and Nutrition Education Program (EFNEP) and a realistic evaluation of its accomplishments and effectiveness to date (Senate Report No. 96-246). In response to this mandate, a study plan for the adult portion of the program was developed and reviewed by

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*The sums appropriated for the full program (adult and youth) were approximately fifty-nine million dollars in FY '82.

Congressional and Science and Education staff prior to its implementation. Due to limitations of time and resources 4-H EFNEP was not included as part of this study. Later, in reviewing some preliminary results from the adult study,* Congress also expressed a desire for an assessment of 4-H EFNEP. As a result, a study was designed** which attempted to utilize, to the maximum extent possible, information that had already been acquired from the preceding study but focused on issues most germane to 4-H EFNEP. The major purposes of the study were:

- to document the program objectives, expectations, information needs, and causal assumptions of policy-makers and program managers;
- to determine the extent to which program objectives and information needs are defined in measurable terms;
- to describe the diversity of program activities currently under way; and
- to explore the likelihood that program activities would achieve measurable progress toward program objectives.

In response to a Request for Proposal (RFP) issued by USDA in June, 1981, InterAmerica Research Associates, Inc. was awarded a contract to provide the necessary services for a study of 4-H EFNEP.

The study of 4-H EFNEP consisted of the following:

- National Level Interviews

Twenty-two national level interviews were conducted during June and July, 1981 to gather information about the 4-H EFNEP, and to identify issues of interest to program administrators and people associated with or familiar with the Youth Program. Each interview included questions about 4-H EFNEP intentions and priorities; appropriate measures of progress; and program operations, materials, activities and functions.

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* For the results of this study see: "An Assessment of the Objectives, Implementation and Effectiveness of the Adult Expanded Food and Nutrition Education Program: Summary", ES, S&E, USDA, Washington, D.C., February 1982.

** By the Evaluation group of the Program Development, Evaluation and Management Systems Staff of the Extension Service (formerly the Program Analysis Staff of the Science and Education Administration's Office of Joint Planning and Evaluation) of the U.S. Department of Agriculture.

- Review of Relevant Literature

The literature relevant to the 4-H Expanded Food and Nutrition Education Program was reviewed to determine the extent to which information has been accumulated concerning the effectiveness of nutrition education activities in producing nutrition awareness, nutrition knowledge gains, changes in attitudes, behavior change, and family impact. Also reviewed were the extent to which Youth EFNEP participants, staff and activities had been characterized, teaching methods and recruitment techniques described, measures of progress developed, and program effectiveness determined.

- Analysis of Available Data

Information about the background, training and experiences of 4-H EFNEP staff and examples of types of 4-H EFNEP activities and functions were collected from 36 local and nine state 4-H EFNEP staff during State and local interviews for the study of the adult program. Funds allocation data was also collected and compiled for this study. This information was summarized and used to provide additional perspective for study analysis and synthesis.

- Development of a Program Model

A descriptive model was developed which graphically represents the logical structure of the 4-H EFNEP, and describes the desired activities, expectations, and objectives as defined by policy-makers and program guidelines.

- Development of Issues and Conduct of Case Studies

Based upon the national level interviews, existing data base information, review of the literature, and information obtained during development of program logic, twenty issues were developed and revised to guide field interviews, and to provide focus for study analyses. The issues presented in Table 1 served as a basis from which to examine the program's potential for useful evaluation, and to provide a link among the national level interviews and program logic model during site visits to State and local program units.

Site visits to five States and nine local projects were conducted to determine what program operations and activities were actually under way, to observe and document the reality of goals and objectives, to collect information on the kinds of results that could be expected from effective program implementation, and to ascertain what measurements and comparisons are feasible and obtainable. Four of the States were selected at random subject to the constraints that they had not participated in the adult study, had funds to carry out a youth program of sufficient magnitude to warrant observation, and that each of four geographic regions were represented. Within each State two local sites (or units) were selected at random, one being urban and the other rural (if available). The fifth State and its local site were included because they were believed (by ES staff) to exemplify desirable management practices and project activities.

FINDINGS

For purposes of brevity, the responses to the 20 issues in Table 1 are summarized under the following five sections:* (1) Program Perspectives and Goals; (2) Program Audience; (3) Program Administration; (4) Program Operations and Activities; and, (5) Program Evaluation.

Table 1: List of Issues Identified

1. Does 4-H EFNEP address a real need or problem? (How important is the problem? Do program personnel perceive a real nutrition problem? Do other programs address the problem? How does 4-H EFNEP compare to other programs in the effectiveness of nutrition education for youth? How do the programs coordinate with one another?)
2. Who are the program's target audiences, and what are the program's objectives and expectations?
3. Other than Federal funding, what additional contributions are received? (Total money designated? Total money reported?)
4. How are program clients being reached? How many are being reached?
5. Should 4-H EFNEP include youth younger than those currently served?
6. How much exposure (hours) do youth receive? What is the relationship between exposure and outcome?
7. What is the structure, identity and focus of the program? (To what extent is there coordination/cooperation (at all levels) between 4-H and EFNEP?)
8. Are staff training and development activities appropriate?
9. Are volunteers being utilized appropriately?
10. What is the most effective local level structure? (One Supervising Home Economist for both Youth and Adult Programs? One Aide for both Youth and Adult Programs? Youth sites only where there are Adult sites?)

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* For a more detailed analysis by each separate issuesee: "A Study of the Implementation of the Youth Component of the Expanded Food and Nutrition Education Program". InterAmerica Research Associates, Inc., Rosslyn, Virginia, January, 1982.

11. What is the feasibility of a national program evaluation? (Nutrition knowledge impact? Attitudinal change? Behavioral (practice) change? Health status impact? Youth development impact?)

12. Does multiple intervention yield greater impact? (Is education for the homemaker, youth or combination most effective?)

13. What are the most effective program approaches (summer, year round)?

14. What are the most effective program activities (demonstrations, trips)?

15. What are the most effective program materials (written, media)?

16. Is there interest in technical assistance in the design and conduct of evaluation studies at the site level?

17. Do EFNEP youth continue into other 4-H activities?

18. Are there current efforts in program development or nutrition research? (Is there a list of future research needs?)

19. Is there a method to share materials and success strategies between sites and between states?

20. What problems and/or suggestions are reported by program staff?

1. Program Perspectives and Goals

Interviews with State and county 4-H and EFNEP staff revealed several immediate nutrition and health problems faced by program clients and program personnel. Among those mentioned were: child obesity or underweight; caloric undernutrition; a lack of milk, fruits and vegetables in the diet; anemia and deficiencies in calcium and essential vitamins; poor eating habits; lack of sanitation; dental problems; mismanagement of food resources; lack of knowledge about nutrition, food selection, preparation, storage, and cost-effectiveness; and the nutritional needs of pregnant teenagers.

State and local staff reported providing nutrition education for youth by teaching principles of balanced diets, nutrition, and the acquisition and use of foods. Emphasis is placed on snacks youth can make at home, and on food selection and preparation. Efforts are made to recruit and involve other members of a low-income family, and to cooperate and coordinate activities with other nutrition projects or agencies. Finally, special programs have been introduced to meet special needs, such as a teenage pregnancy-nutrition education series coordinated with local health centers.

2. Program Audience

The youth program audience is described in the EFNEP Policy Guidelines* as 4-H age youth from low-income families primarily in urban areas (communities with a population over twenty-five hundred). Existing data base information and observations from the 4-H EFNEP Study indicate that, with minor variations, sites and states comply with national guidelines.

All program personnel interviewed during the Youth Component Study agreed that 4-H EFNEP was serving local youth who needed program services the most. Program staff were, however, split on the issue of whether or not to include youth groups (such as younger youth or youth from lower-middle income families) other than those currently enrolled in the 4-H EFNEP Program.

3. Program Administration

a. The Relationship Between 4-H EFNEP and 4-H. 4-H EFNEP is funded by approximately twenty percent of the Expanded Food and Nutrition Education Program annual budget and is administered through the Cooperative Extension Home Economics Unit and 4-H Program. This implementation structure has caused problems and confusion at the local, state, and national level. While it is clear that 4-H EFNEP is funded by EFNEP, with administrative authority residing with the Director of 4-H, there appears to be much confusion concerning the authority and responsibilities of EFNEP and 4-H staff implementing the program.

According to national level staff interviewed during the study, the problem is a lack of defined staff roles and coordination with regular 4-H and adult EFNEP. This results in a lack of clear communication between program staff and across administrative levels. Consequently, this confusion can be found at the state and local levels. While national guidelines provide a framework in which states implement their program, each state (and each site within a state) appears to have its own interpretation of the guidelines; and each state (and site) has its own implementation of those interpretations.

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*Revised Policy Guidelines and Suggestions for Conducting the Extension Expanded Food and Nutrition Education Program. Extension Service, United States Department of Agriculture, Washington, D.C., 1976.

In recent years "traditional" 4-H programs have concentrated in suburban areas, where clients are generally from middle income families; while 4-H EFNEP has focused on low-income neighborhoods. Without deliberate attempts to move 4-H programs into low-income areas and to adapt 4-H clubs to the needs of low-income youth, mainstreaming and continuation of EFNEP youth into other 4-H activities is not likely, even with close communication and cooperation between 4-H and EFNEP staff. Youth interviewed during the 4-H EFNEP Study appear to enjoy 4-H activities, but camps, transportation, as well as many of the "traditional" 4-H activities cost money. Often while state and local staff inform EFNEP youth about 4-H, and mail out 4-H newsletters, they admit that they really do not expect the youth to continue; nor in many cases do they make attempts to raise funds which allow EFNEP youth to participate.

b. Financing and Resources. Program staff interviewed during the 4-H EFNEP Study in four of the five states reported that Federal funds are the most important source of 4-H EFNEP resources, and that some State contributions are also provided. In-kind contributions constitute the major portion of State funding in three of the states, while monetary contributions are greater in two states. State contributions (both monetary and in-kind) range from 4% to 96% of the Federal funding allocation for the state. Local contributions (both monetary and in-kind) provide from less than 4% to 191% of the Federal funding allocation for the state. Only one state reported monetary contributions from corporations or organizations, and this contribution was minimal. However, several sites reported miscellaneous, unrecorded, contributions from local organizations, churches, food and retail stores.

c. Staff Training and Development. Training and development of professional, paraprofessional, and volunteer staff in administrative, content, and methodological areas were reported during both the 4-H EFNEP Study and the Adult EFNEP Study. The majority of professional program staff appeared to be adequately trained in the various areas important to the implementation of the program (as judged by the contractor's staff on the basis of the amount of training reported by EFNEP staff for different subject matter areas).

Paraprofessionals interviewed during the 4-H EFNEP Study reported attending at least two weeks of initial training and reported that in-service training is conducted weekly (in three states), biweekly (in one state), or monthly (in one state) in the form of a staff meeting at the county level.

d. Volunteer Utilization. Data from the Adult EFNEP Study (involving nine states and 36 sites), indicates that 1,413 volunteers were working with EFNEP youth during fiscal year 1980 and that 58% of those volunteers began working with EFNEP during that year. State personnel reported that over the past years the number of volunteers generally fluctuated (44%), or decreased (33%).

Volunteers interviewed during the Youth Component Study, almost without exception, function as assistant and/or resource volunteers. They generally work with a paraprofessional and help in providing transportation, maintaining order, distributing materials, and leading nutrition games. Only rarely do volunteers teach or lead clubs independently, recruit youth or other volunteers, secure educational materials, assist in training, organize new groups, plan learning experiences, or organize nutrition-related experiences without the direction of a paraprofessional.

Program staff reported problems finding, recruiting, and training volunteers, especially teaching volunteers, and particularly low-income volunteers. Most of the reported problems concerned low-income, low self-esteem, lack of resources for demonstrations or necessary foods, and lack of time, since many potential volunteers also work.

e. Recruitment and Referral. Recruitment methods reported during the 4-H EFNEP Study involve a variety of program activities including: referral from EFNEP homemakers; referral from current 4-H EFNEP clients; recruitment in schools, community clubs, neighborhoods, and housing units, distribution of flyers or posters in public places; mini-camps and day camps; demonstrations; and special awareness or attention attraction efforts.

Analyses of existing data from the Adult EFNEP Study indicate that the number of youth enrolled in 4-H EFNEP in fiscal year 1980 ranged from 3,495 to 70,532 (over the nine study states and thirty-six sites). The average recruited in these nine states during fiscal year 1980 was reported to be 13,931, or an average of 71% new enrollees. Youth Program staff interviewed during the Adult Study reported that enrollment fluctuates (60%) or has decreased(33%). The major reasons given for the change in numbers of youth participants were funding level variations and resultant changes in program staff.

f. Research and Program Reporting Mechanisms. There were no reported statewide research activities concerning 4-H EFNEP, nor visible program research activities at the local level. While some related research was reported, the availability of information and resources through the Land Grant Universities did not appear to have been explored by most state personnel.

The only record maintained consistently at the state level, reported by those states participating in the 4-H EFNEP Study, was ES Form 255, Unit Report, Expanded Food and Nutrition Education Program, which contains an annual summary of families, Aides, 4-H EFNEP youth, and volunteers. However, four of the states visited also maintained files containing unit monthly reports or work sheets which consist of unit goals and committments.
Most, but not all, of the records kept on file in state and county offices are used for statistical and narrative summaries and maintained as part of the Federal or State Extension reporting system. There was little evidence that the records maintained by State and local offices were used to assess the effectiveness of program activities, the quality of nutrition education provided, or the progress and performance of youth participants.

4. Program Operations and Activities

Program operations, or the mechanisms used by program staff for the delivery of nutrition education services, and the diversity of program activities were examined during the 4-H EFNEP Study.

a. Program Approaches. State and local Youth Program staff interviewed during the Adult EFNEP Study reported that the peak period for 4-H EFNEP activities was generally the summer. The length of summer sessions was reported to vary from less than one week to more than eight weeks, with more than half the programs lasting four weeks or longer. Activities vary, but include nutrition games and songs; food tasting; food preparation; demonstrations; film strips; field trips to grocery stores; gardening; and discussions about health, diet, nutrition, the importance of breakfast, etc. Several short summer programs were reported to last from one day to two weeks and serve two functions: (1) to provide nutrition education to youth; and (2) to recruit youth into long-term year round EFNEP programs.

Year round programs generally last six months or longer, and were the most common program approach reported during the 4-H EFNEP Study. Short school year programs are typically opportunities provided by school authorities or local club members which allow EFNEP personnel to introduce lessons in nutrition education to youth in school or local clubs. Often one-shot demonstrations take place in public places, such as shopping centers or parks, and are used to increase youth awareness of nutrition and to recruit youth into long-term clubs or 4-H activities.

b. Program Activities. Teaching activities include participant preparation (hands-on) activities related to food and nutrition, games, demonstrations, field trips, crafts, gardening projects, and day camp songs. State and local EFNEP staff interviewed durng the 4-H EFNEP Study reported that demonstrations, group involvement; and hands-on experiences are the most effective nutrition education activities and teaching methods used with youth.

Eleven 4-H EFNEP instructional activities were observed during the 4-H EFNEP Study. Three of the activities appeared to have been well planned, and were well taught. These lessons were organized, the aides well prepared, and the youth attentive and enthusiastic. Another activity, while not well planned and organized, did identify the lesson learning objectives and properly present lesson material. The youth observed in these four activities demonstrated an understanding of several basic nutrition principles.

Seven of the observed 4-H EFNEP activities were generally not well organized, well planned or well taught, and were in need of greater focus or direction. Aides teaching these lessons appeared to need further training in principles of teaching and nutrition. They also appeared to need further preparation in order to present the lesson materials in a more coherent and more appropriate manner. However, the youth observed in these seven activities were sometimes attentive, sometimes enthusiastic, sometimes informed about nutrition, and usually had fun.

c. Program Materials and Model of Learning Objectives. Progam materials reported by EFNEP staff can be categorized into two groups: (1) those for teachers (paraprofessionals and volunteers) which include complete project books or booklets; and (2) those for learners, single-sheet handouts or pamphlets. Complete project booklets usually cover a wider range of topics and include greater detail about those topics. Specific learning objectives and educational goals of each lesson were much more common in the complete booklets than in the single-sheet handouts.

Based on the content of program materials reported to be most often used with youth participants, and on observation of program activities during the 4-H EFNEP Study, a conceptual model of common 4-H EFNEP learning objectives was developed. The model helps to illustrate program intentions (as reported by policy-makers and program implementers) and program reality (as observed in case study visits during the 4-H EFNEP Study); and helps to: (1) organize and prioritize common learning objectives of the program; and (2) illustrate the degree of accomplishment of common learning objectives.

It is the program's intent that the objectives in the model increase nutrition knowledge and improve the attitudes and behaviors of youth participants; and that these changes affect the entire family diet. Further, the objectives are considered to the mechanism through which personal and social development of youth participants are possible. Based on interviews with youth and observation of program activities during the 4-H EFNEP Study, the average program emphasis in accomplishing learning objectives is focused on an introduction to and increased awareness of the importance of foods and nutrition to health, the four food groups, the number of appropriate servings from each food group (the

4-4-3-2 formula), the concept of a balanced diet, the importance of three meals a day, the Daily Food Guide, and the importance of nutritious snacks.

d. EFNEP Staff Suggestions. Several State personnel reported the need for increased program support and direction (without an increase in regulations and requirements) from national personnel. They also reported the need for re-direction and re-evaluation of program philosophy toward more realistic needs and goals.

The problem of limited funds was expressed in all State and local sites participating in the 4-H EFNEP Study. The effects of limited financial resources included: cutbacks in the number of program sites; limited variety of program activities in local sites; inability to provide competitive employment to attract quality program paraprofessionals; job insecurity; and limited supplies.

Program staff reported a need to improve 4-H EFNEP participant continuation into other 4-H activities, and in three of the states, program staff indicated a need to improve 4-H EFNEP and 4-H coordination and cooperation. Several program staff reported the need for a new staff position to serve as liaision between 4-H EFNEP and regular 4-H activities.

Program staff at State and local levels indicated the need for updated nutrition materials, and materials designed or adapted for several different age levels. New films and slides are needed because old ones are out-dated and worn-out.

Program personnel in all States reported that record keeping and recording requirements are redundant and time consuming, and yield little or no information which supports local activities and program performance. EFNEP staff suggested simplification of reporting forms, consolidation of information to avoid duplication, use of the same reporting form for local and State reporting requirements, and the development of new reporting mechanisms after the needs of decision-makers have been identified at all levels.

Most program professional staff, at all levels, reported the need for evaluation data on program impact. Included in their needs were: (1) clarification of program objectives; (2) priority of educational objectives; (3) specification of reporting needs; (4) definition of measurement criteria; (5) standardized tools to measure program progress and impact (including changes in diet); (6) evaluation methods that are an integral part of the program and include longitudinal information on behavior, youth development, etc., and (7) clarification of desired program impact.

5. Program Evaluation

The study explored the extent to which the 4-H EFNEP has specified measures of progress and collected evidence of program performance; has established realistic, measurable objectives; and has made use of current program performance information.

Collected information is far from what program personnel view as necessary evidence of program performance. Program assessment, as carried out by case study sites, rarely involved measures of youth progress as an influence in subsequent planning. Although most Extension staff interviewed during the 4-H EFNEP Study indicated that they felt standardized measures of progress and evaluation would improve the quality of teaching, the quality of teaching materials, and improve the program, little or no effort has been made to evaluate the Youth Program or to develop standardized tools or documentation. Part of the problem is the difficulty in national criteria standardization, and the lack of direction from above. One of the major flaws with past studies of national health and nutrition problems, and one that still persists today, is that no accepted approach to national health problems exists with which to conduct an evaluation. A General Accounting Office (GAO) report in 1978 focused on the need to develop more reliable techniques to measure food consumption and methods to assess nutritional status. But, nonetheless, measurement indicators are not available today, nor are they likely to be available in the very near future, to examine the effectiveness of nutrition education provided to program participants.

For very real reasons, local program administrators fear measurement instruments would jeopardize the objectives and goals of the program by requiring limited or narrow indicators of progress instead of encouraging the acquisition or achievement of more general principles of nutrition knowledge, improved diet and health, and personal development. On the one hand, State and local EFNEP administrators want to avoid evaluations that guide and direct program activities, but on the other hand, administrators are searching for guidance and direction in the development and use of standardized measures of progress and indicators of program effectiveness which demonstrate program worth.

The identification and specification of a central core of national nutrition content to direct, but not inhibit, specialized local focus would enhance the quality and focus of program lesson plans, the development of measures of progress, nutrition evaluation methodology, and need not infringe upon local needs, individuality, autonomy, or flexibility. Without deliberate attempts to defined and operationalize the program objectives at national, State, and local levels, to identify what policy-makers want to measure, and to define standardized criteria for measurement, it is unlikely that program performance can be evaluated.

CONCLUSIONS AND IMPLICATIONS

Five study findings and their policy implications identified opportunities to change program activities, objectives, and uses of information in ways likely to improve program performance.

1. Clarification of Program Focus and Identity

A lack of communication between program staff and across administrative levels has resulted in confusion at State and local levels over leadership, authority, responsibility, coordination of activities, and program implementation.

- Deliberate attempts should be made to redefine the identity of 4-H EFNEP, to more realistically specify and actualize national program guidelines and to clearly describe the functions, roles, and responsibilities of program staff.

Program management must determine and describe the relationship between 4-H EFNEP and 4-H Extension, re-examine program autonomy, and provide new emphasis and clear program direction. A realistic assessment of the interests, resources, priorities, and values within the low-income community must be considered and accommodated by the purposes of the program.

2. Standardization of Curricula and Staff Development Guidelines

Common learning objectives, based on the reported use of program materials, were compared to performed and accomplishment, based on observation of several program activities. While good in theory (goals and expectations), program activities providing nutrition education were generally disapointing. One reason for the apparent ineffectiveness of activities is the lack of standardized curricula. A second reason for this apparent ineffectiveness of activities is lack of standardized teaching methods and principles of education for volunteer and Program Aide development.

- A standardized core of nutrition content should be specified and developed from which a series of graduated lessons and operational learning objectives can be designed, with established criteria for measurement.
- A standardized in-service program should be developed and implemented to provide teaching methods and educational principles.

3. Specification of Reporting Needs

Before usefuly standardized program evaluations can be implemented, it will be necessary to determine what decision-makers and program managers really want to know about the 4-H EFNEP Program.

- The information needs of program management should be determined, and a simplified record keeping system should be designed which includes relevant program information.

To be useful in evaluation, reporting mechanisms must include data that can immediately feed back into subsequent planning and implementation activities, while at the same time, fulfill the information needs at the national, state, and local levels. Further, if long-range developmental and behavioral changes are important indicators of program performance, record keeping procedures must be capable of identifying former participants for longitudinal follow-up.

4. Development of Measurement Indicators

Program staff at the state and site level reported the need to go beyond individual success stories and document evidence of program success; to develop standardized methods for measuring individual progress in nutrition education.

Data is not available to examine the effectiveness of program operations or performance, and interviews with program managers emphasized the gap between program needs, program intentions, and program reality. The general consensus of program staff interviewed during the 4-H EFNEP Study was that no reliable evidence is available to determine if program objectives are being met.

- Deliberate attempts should made to define measurement criteria, and to develop standardized tools to measure program progress and impact.

5. Technical Assistance in Evaluation

Program personnel reported that evaluation is a weak point of 4-H EFNEP, and that technical assistance workshops in the implementation of evaluation techniques and methodology in 4-H EFNEP would be extremely useful and appropriate to local needs.

As a first step in technical assistance, an evaluation handbook could be developed and designed at a level appropriate for state and local program staff, with appropriate practice examples, and different expectations, interest, and skills considered. A field trial of the methods and implementation procedures contained in the evaluation handbook would be beneficial to insure its appropriateness and use. Such an implementation procedure would provide an opportunity to evaluate the concepts and procedures contained in the handbook, confirm that the level of instruction is appropriate for program staff, verify that the content and methods are understood by those wishing to use the handbook, and assure that needed information is not left out. Further, an implementation procedure of an EFNEP evaluation handbook would provide a catalyst for those interested in conducting an evaluation workshop, or support for those in need of further technical assistance in evaluation.

For information about this study call (703) 235-3168 or write to:

Program Development, Evaluation and Management Systems Staff
Extension Service
Science and Education
U.S. Department of Agriculture
Washington, D.C. 20250

ZEROING OUT OF EFNEP

Senator HARKIN. I take it from your answers to my questions, that the zeroing out of this Expanded Food and Nutrition Education Program is not something that you are entirely happy with. You see some benefits in the program, right?

Dr. JOHNSRUD. Absolutely. I said this earlier, and I hate to keep repeating it, but this was a very challenging and difficult budget to build given the constraints that we have with the federal deficit. We had to make some hard choices, and this is what our budget represents.

Senator HARKIN. I hope that this committee will make different choices, Mr. Chairman, on this side.

NUTRITION PROGRAMS

Dr. BENTLEY. Mr. Chairman, if I may just expand a bit on my personal experience with the program.

As you probably know, I spent a good many years as Dean of Agriculture at the University of Illinois. One of our annual events was to hear reports from the various people who were selected as outstanding workers employed in Chicago, which is, of course, a major influence in that state, but there are also a lot of smaller cities in Illinois that are still communities of substantial size. I heard, every year, reports of people telling me how they benefited themselves, and how they helped others through the program.

I say this because I don't wish to have anyone feel that the money spent in the past years—after all it has been several years that we have funded this program—I think that there have been many benefits that have come through this, and we should not be apologetic for this at all. We are forced, as we say, because of budget problems. You have asked the question, and we have responded as best we can to that question in all honesty.

One additional thing, if I can have a little time—I think we need to reemphasize, within the Extension Service, our nutrition education programs, especially as they relate to agriculture in totality, whether it be the livestock industry, or the different kinds of products that we are developing that are important to the future.

We have publications that attest to what I said here coming from the Extension Service. I mainly speak, Mr. Chairman, because I want to commend them for the effort they are making in this area where there are not a lot of funds or a lot of flexibility to get it done.

Senator HARKIN. I appreciate, both Dr. Johnsrud and Dr. Bentley, your candor in responding to my questions on the Expanded Food and Nutrition Education Program.

REFUSAL RATES ON SURVEYS

I just want to ask a couple of questions of Mr. Lee on the Economic Research Service. I don't know how much time I have left.

I was intrigued, Mr. Lee, in your opening paragraph, you said that, "ERS must be the honest mirror to agricultural and rural America. Those words are, in essence, our mission statement." Sometimes many of us get the feeling that the Economic Research Service is not a mirror for the farmers of America, but it is more of an honest mirror for administration policy.

I am sort of following up on what my colleague from Iowa was talking about. When your agency interviews farmers to determine their financial standing, what is the refusal rate of farmers refusing to participate?

Mr. LEE. Senator Harkin, the survey itself is conducted by the National Agricultural Statistics Service. We work very closely with it, with the training schools and the enumerators. If I may turn to my colleague, Dr. Kibler, and ask him if he has that information.

Mr. KIBLER. We have, I believe, approximately 24,000 farmers in that survey. Our experience has been that generally we have maybe a 15-percent refusal rate, and perhaps another 8 to 10 percent that we either have difficulty trying to contact during the survey period, or who have their farm records with an accountant so they can't be easily accessed.

If those numbers are not correct, we will put the exact numbers in the record, but I hope that this gives you some feel for response rates. We have had a slight improvement in the response rate in the last year as a result of the financial difficulties farmers have.

Senator HARKIN. You are saying that the refusal rate is about 15 percent.

Mr. KIBLER. That is correct.

Senator HARKIN. In the survey on determining financial soundness?

Mr. KIBLER. Yes.

Senator HARKIN. I would like to know exactly what it is, because you do keep that data.

Second, I would like to know how the rate has changed in recent years, whether it has gone up or down. You say that it has gone down.

Mr. KIBLER. Yes; we can provide that.

Senator HARKIN. You say that it has gone down.

Mr. KIBLER. It has gone down in recent years.

[The information follows:]

FARM COSTS AND RETURNS SAMPLE SIZE AND RESPONSE RATES

Survey year	Sample size (No.)	Percent		
		Responses	Unable to contact	Refusals
1981	16,336	72.5	7.4	20.1
1982	13,678	74.5	7.8	17.7
1983	22,561	67.9	9.3	22.8
1984	23,035	75.6	7.3	17.1
1985	23,017	72.1	7.4	20.5

Senator HARKIN. I just wonder how this affects the statistical reliability of the data. It has been my experience that many farmers experiencing very difficult financial situations are those who don't want to talk to anybody. They are the ones who refuse and so it tends to skew the data a little bit toward the brighter side, let's say.

Mr. KIBLER. I might say that we have had some independent checks, to some extent, where states do surveys. They survey the banker's side. Basically, the state surveys have tracked very closely to what our former surveys have shown.

John, do you want to comment on that?

Mr. LEE. I think you have said all that I would say on that, except that we work very hard to assure a successful survey. It has always been the case that when you ask farmers for financial information, even when times are not as hard as these, farmers are more reluctant to talk about their financial situation than to tell you how many cows or how many acres of corn they have.

For that reason, we have doubled our efforts and have put a very intensive effort into the training schools for the enumerators, to really get these enumerators well armed with information that they can use to convince the farmer that we need this information, that Congress and the administration need to understand what the situation is, and that without their cooperation we wouldn't have it.

One of the things that we have found is that, in fact, compared to what we would have expected prior to doing these surveys and compared to what you would expect from other survey history, we have felt that these surveys have been very successful.

The data we are getting are very reliable. We do have some checks. For example, we not only ask them about their financial information, but we ask them about things that we can compare to other surveys, as well as census data, and they match very well. No data are perfect, they all have error ranges in them, but we believe that these are very solid data and give us a good approximate handle on the condition of the country.

Senator HARKIN. Mr. Chairman, let me just say that I find it an interesting comment upon the present situation of our agricultural states, when we find the Extension Service is being cut, and we are increasing the amount of money to get more statistics about our agricultural situation. We are losing more and more farmers, and we are spending more and more money to get the data. There is just something very ironic about that, it strikes this Senator.

Thank you, Mr. Chairman.

Senator BURDICK. Senator Cochran.

Senator COCHRAN. Thank you, Mr. Chairman.

HARKIN-GEPHARDT BILL

Mr. Chairman, I am curious about whether or not the Economic Research Service has had an opportunity to evaluate the Harkin-Gephardt farm bill.

Senator HARKIN. I guess I will stay around now, I was getting ready to leave.

Senator COCHRAN. I have been on a program a couple of times with the distinguished Senator from Iowa in the recent past, and we always end up talking about what needs to be done to improve the opportunities for farmers under present economic conditions.

I have heard citations to studies that have been done by Texas A&M University, Iowa State University in conjunction with the University of Missouri and an institute for research that is funded partially by appropriations approved by this committee.

I wonder whether or not the Economic Research Service has undertaken an evaluation of that proposed legislation and can tell us a little about the economic impact of it on farmers, jobs, and agribusiness, and the like.

Mr. LEE. Senator Cochran, we have not specifically evaluated the Harkin-Gephardt bill, nor any of the several bills that are now before Congress. We have, as is our custom, continued to do, I guess you could call it, generic evaluations, looking at the impact of various generic approaches to farm policy as background information. It is not fair to compare those to any one individual bill, though, because they do not include the specifics of those bills. I am not sure that there has been any analysis, at least on the recent versions of any of the bills.

Senator COCHRAN. Is there any intention to conduct any research of that kind in order to provide the Congress with information on which it could base its decisions about the proposals that are pending before it now for change in the 1985 farm bill?

Mr. LEE. I am sure, Senator Cochran, as we come to the time when one has to address the pros and cons of alternative bills, that the administration will be addressing those, and will be using analysis that the Economic Research Service and others would do that would be made available. Right now, we haven't made any plans to do a comprehensive analysis of the alternative bills or to publish those in any way. I suppose that it could be done.

In the past, when we approached the point where there seemed to be a final set of major proposals, we have sometimes evaluated the pros and cons, not in a conclusive or judgmental kind of way, but just to lay out some of the pros and cons of the proposed alternatives, and have published some of those results. We have not done that this year, and we currently don't have any plans to do that, but that could be considered.

Senator COCHRAN. I personally think that it would be helpful to the Congress if you would. I know that it is not the kind of research that is described in your statement—some of the projects and high priorities being undertaken by the ERS—but I think that it would have a practical benefit to those of us who are charged with the responsibility of making these decisions.

Senator HARKIN. If my colleague would yield on that.

Senator COCHRAN. I would be happy to.

Senator HARKIN. I would welcome that, too. I think that we ought to do as much study on these various proposals as possible. I would only say that if ERS is going to do it, I would only hope and trust that it would be more than some kind of a hip-pocket type of a study, that it would be a good study.

Senator COCHRAN. I would be glad to reclaim my time now. If you are going to make a speech, you can do it on your own time. I reclaim my time now. I refuse to yield further to the Senator.

Let me ask you this question. Could you submit, for the record, an answer to specific questions such as your impression of the number of jobs that would be lost in the agricultural industry if the Congress adopted the Harkin-Gephardt proposal. Is that a question that could be answered by the ERS and filed for the record as a part of the transcript of this hearing?

Mr. LEE. Senator Cochran, we will certainly give you the best possible answer we can give you to any specific questions that you provide to us. I might add that it would be useful to us if Mr. Harkin and others would provide us with copies of their bills so we would know the specifics of those bills.

[The information follows:]

We have just received the bill. We do plan to analyze it along with the other major bills that have been proposed, and will send you a report later. In general, when supply is restricted, prices usually rise. The response to higher prices and lower supplies would be expected to take one of three forms: less exports, less domestic consumption, or lower feed use, with resulting lower production of livestock and livestock products. Taken together, those reductions would tend to reduce employment in the agricultural industry. Additional effects could result from the change in consumers' spending patterns as higher food expenditures lead to a reduction in consumer spending on other goods and services with accompanying lower employment in sectors providing these goods or services. The important point is that jobs are related to the volume of economic activity. Any supply management program that restricts supply below market-determined levels will also tend to restrict employment needed in farming and farm-related activities.

Senator COCHRAN. I will mail you a copy of the bill. I would appreciate it if you could let us know what your estimate is of the number of jobs that would be lost in the agricultural industry in America if that bill were enacted by the Congress.

EXTENSION SERVICE BUDGET

The Extension Service budget, as I understand the request before the committee, contemplates about a 21-percent decrease from the level of funding approved by the Congress and appropriated last year. That worries me in terms of the impact that that might have on the ability of the Extension Service to provide needed assistance to producers, specifically information about new technologies or transfers of information.

What is your reaction to that, Dr. Johnsrud? Would the ability of the service be diminished or affected adversely if we approve the level of funding that is 21 percent below last year's level?

Dr. JOHNSRUD. Senator, I don't think that there is any question that when you reduce the budget, you reduce service, that just goes with it. I want to reiterate again that we need to look at where those reductions are being made. The $57 million is just one program area.

The other thing that we need to keep in mind is that states then would need to decide, with that reduced income, where they are going to put their efforts. In that vein, one of the criterion in building this budget was that we wanted to have some increase in the formula funds to provide that flexibility. There is $7.9 million in there. The $7.9 million doesn't measure much against the $69 million, I suspect, but you need to remember that the major cut is in the food and nutrition program.

4-H CLUBS

Senator COCHRAN. Would there be any impact necessarily on 4-H clubs and their activities around the country?

Dr. JOHNSRUD. I would be the last one to say that there will not be an impact, but it depends on how the states reallocate their limited resources to deal with this. Some may not diminish that, and some may increase it.

It is very difficult for me to respond to that, but it would be naive to say that there will not be a reduction, there would have to be, unless they can find some other source of funds.

Senator COCHRAN. That is not a reduction that is proposed in the budget, though.

Dr. JOHNSRUD. That is right.

Senator COCHRAN. Last year, we had one Senator who came here to testify about the fact that the proposal to cut the Extension Service budget was a proposal to do away with all the 4-H club support from the federal government. That would not be an accurate statement if you described this proposal in that way, or would it?

Dr. JOHNSRUD. That is an inaccurate statement. There is no intent to do that.

Senator COCHRAN. Those are decisions made at the state level, is that correct?

Dr. JOHNSRUD. Yes, sir.

CONSERVATION RESERVE PROGRAM

Senator COCHRAN. Let me ask you one other question about the Economic Research Service. In your statement, you mentioned anticipating the interest in and support for a Conservation Reserve Program, and how you had developed the base of information that really supported the changes that were included in the 1985 farm bill and the Conservation Reserve Program.

Do you feel a need to continue to evaluate that program, and to do an analysis on the impact that that will be having on the economies in rural America?

I think conservation is an important issue. I just wonder if you anticipate emphasizing that in your research efforts?

Mr. LEE. Yes, Senator Cochran. We do, in fact, and are continuing to evaluate it, and we are working very closely with the Soil Conservation Service. We have access to all of the information that comes in after each round of bidding, for example, and are looking at the characteristics of the bidders, what kind of land is going out, where it is going out, and what the impacts are nationally, as well as regionally.

We are continuing to do research looking at alternative ways of conducting the bidding process to achieve various kinds of objectives. We provide all of that information to the Soil Conservation Service and to the Agricultural Stabilization and Conservation Service so that they can make those decisions.

We think that the process has been somewhat improved since it was started because we have learned from each round of bidding some information that we can then put back into the analysis. We are very closely monitoring that. We have some research under way. In fact, we feel that we have a pretty good and solid base of information about that program now.

Senator COCHRAN. I appreciate very much having a chance to be here today to welcome this panel to the committee, particularly Dr. Bentley, our friend, whom we see from time to time, as we work on various matters of mutual interest.

I am very sorry that Mary Nell Greenwood isn't here. I notice that Dr. Johnsrud had a comment about her legacy there as Administrator of the Extension Service. We miss her very greatly.

I just wanted to comment about her, and about you. Thank you very much for your assistance to the committee. You help us in a lot of ways, and we thank you for that.

Thank you, Mr. Chairman.

HARKIN-GEPHARDT BILL

Senator HARKIN. Mr. Chairman, I just want to finish the statement that I was making before I was cut off abruptly.

What I was saying is that I invite any and all, not only invite, but I urge all studies to be done, not only of the legislation that I have introduced, but all other legislation, including the present farm bill that we are operating under, and comparisons to be done between those two.

I think that ERS has a great deal of expertise to do that kind of research. As I said, I only hope that it would not be a hip-pocket type of research where we would issue a couple of pieces of paper, and then sort of walk away from it.

Again, I point to the study that was done last fall, which I think falls into that category, because I was not provided at that time with a lot of the assumptions that were used, and the data that was used to back up the study. But if that is done in a responsible manner this year, taking a look at the new bill that we have introduced, I welcome and invite it. I think that it adds to the debate, and it adds to broadening our viewpoints as to what path we want to take in our agricultural policy.

I don't in any way wish that we shouldn't have these studies done. I hope that we do, but I just hope that there will be accompanying data, and the assumptions that were used in reaching these conclusions, so that we can be better able to know how ERS has reached certain conclusions.

I would just point out, for example, in the study that was done last fall, there was a statement made, and it was widely printed in the press, that adopting that bill last year, the bill that we introduced last year, would mean many thousands of jobs would be lost in our country.

We looked at the report that came out of your office that mentioned these jobs that would be lost in the grain storage area. Thousands of jobs would be lost due to a lack of employment in the grain storage area, I understand that. But then what you have to ask is what we really want. Is that where we want jobs, storing grains that we can't use and that depress prices?

On the other side, how many more jobs would be involved in terms of keeping farmers employed on the land compared to those that might be lost moving the grain, storing it on barges, and putting it in elevators, and things like that.

That is why I said, do a study, that is fine, I welcome and invite that, just as long as we have the data and the assumptions and backup information so that we know what it is saying. I just want to make that point.

Mr. LEE. Senator Harkin, if we do a study, we would want to do it comprehensively and put on the table all of the assumptions, all of the data, and we would invite a professional critique of that because we want to be objective, and we want to be complete, not partial.

This is one of the reasons that we have not done some of those studies to this point because we know that the legislation, for example, has changed, that the provisions are changing, and we want to make sure that we are analyzing something in the current provisions, and not something that may have been in the past provisions.

It would be helpful to us to have the specifics of the various legislative proposals to make sure that we are, in fact, analyzing the correct thing.

I thank you very much.

Senator HARKIN. Thank you, Mr. Chairman.

Senator BURDICK. Senator Sasser.

Senator SASSER. Thank you, Mr. Chairman.

ATTRA

Dr. Johnsrud, as you know, the appropriate technology transfer for rural areas is to be stationed at the Agricenter in Memphis, Tenn. It has been estimated that this ATTRA facility, when operating at full capacity, will save annually about $2.8 billion in lost nutrients through soil erosion; between $500 million and $2 billion annually in reduced fertilizer use by those farmers who utilize the ATTRA facilities; $2 billion in reduced pesticide use; and a 36- to 56-percent savings in water use.

I think that the numbers justify the establishment of a national center for appropriate technology, and the appropriate technology transfer for rural areas program certainly is prepared to provide these services. Yesterday I was informed, Dr. Johnsrud, by the National Center for Appropriate Technology that they are still awaiting a letter of commitment from your office authorizing them to begin work on the appropriate technology transfer for rural areas. Has this letter or the program itself received your final approval?

Dr. JOHNSRUD. I am pleased to report, Senator, that I have signed off on that, and the check is in the mail, if I can use that term.

Senator SASSER. I am delighted to hear that. I wish that check Godspeed.

I might say, Mr. Chairman, I still have some checks in the mail from my first campaign for the U.S. Senate in 1976 that have never arrived, but I am confident that this check from the Extension Service will move much more rapidly.

Thank you very much.

Senator BURDICK. Thank you, Senator.

I have one or two questions and then I am going to conclude this hearing.

ANIMAL DAMAGE CONTROL PROGRAM

Do you have any information on the monetary loss incurred by farmers from depredation by blackbirds and by animals that are controlled through the Animal Damage Control Program, and I am talking about the monetary loss?

Dr. BENTLEY. I don't have specific data on that. We can get such information. It is an APHIS program, but there has been research conducted on damage, blackbird depredation by a number of states, especially in the Northeast. I can think of Ohio and New York being two states where there has been a lot of work done over the years. Whether they estimated the damage level, I wouldn't know, but I think we can find out. I think that there are some people who have some information that I could supply for the record.

Senator BURDICK. I wish you would, as best you can, on a state-by-state basis, if possible.

Dr. BENTLEY. I would go to two places, to the Cooperative State Research Service, CSRS has some. I think there is some work in ARS, in the research, but it is really a program that APHIS has, and we will find out for sure where the data can be obtained and we will get it for you.

Senator BURDICK. We would appreciate that.

[The information follows:]

ANIMAL DAMAGE CONTROL REPORT ON DEPREDATING BIRDS

There is a lack of comprehensive data on a national level of economic losses to agriculture caused by blackbirds and other depredating animals. Those studies that have been done were limited to losses in an individual state or group of states and are not reliable indicators of economic losses nationwide. APHIS recently completed an annotated bibliography on economic losses from depredating birds. The report included a summary of the research findings on major bird-agricultural losses from a 1985 survey done by Dr. Jerome Besser from what was the U.S. Fish and Wildlife Service's Denver Wildlife Research Center. The attached table summarizes the economic losses documented in the literature from Dr. Besser's report.

Appendix A. Estimated Annual Losses for Specific U.S. Agricultural Crops a/

Crop	Species of Birds Causing Loss	Best Estimate of Local or National Loss (Survey year) Cwt. (million)	$/Cwt	(million)	Loss @ 1973-82 Avg. Price ($ million)	References	Extrapolated U.S. Loss @ ($ million)	Source of Estimates
Blue-berries (cultivated)	Starlings, robins, grackles, orioles, house finches	0.32	50.00 (1973)	1.6	2.0 a/	Mott & Stone (1973)	2.0 b/	Questionnaire survey in 14 States in 1973.
Cherries	Robins, starlings, orioles, grosbeaks, catbirds, house finches, waxwings	0.404	7.50	3.1	11.0	Stone (1973)	10.9	Objective survey in MI tart cherries in 1972. National loss in tart & sweet cherries est. at min. % age of MI tart cherry loss in 1972.
Corn field, ripening	Blackbirds	4.3	4.64 (1981)	20.0	18.8	Besser & Brady (1982)	32.8	From objective survey of 10 major corn producing States.
Corn field, sprouting	Blackbirds, crows, pheasants	0.67	3.88 (1971, 1978, 1979)	2.6	2.9	Stone & Mott (1973), (1973), Heisterberg (1979, 1980)	9.8	Objective survey in VA, KY & TN. National loss per acre at 10% of 3-State loss.
Corn, sweet, ripening	Blackbirds	0.074	6.77 (1973)	0.5 (1966)	0.7	Anonymous (1967)	5.3	Questionnaire survey in MD in 1966. National loss est. at 27% of MD per acre loss in 1966.
Grains, feed (livestock)	Starlings, blackbirds, house sparrows	0.12	6.00 (1979)	0.7	0.7	Glahn et al. (1980)	7.3	Objective survey of TN in 1979 National loss est. from wintering starlings and blackbird numbers in U.S.
Grains, small (wheat)	Mallards & other waterfowl	0.93 (1981)	6.47	0.6	0.5	Knittle & Porter (in prep.)	0.5	U.S. Fish & Wildlife Service est. for MD, SD, & MN.

Reproduced from "A Growers Guide to Reducing Bird Damage to U.S. Agricultural Crops", Jerome Besser, 1985 (Bird Damage Research Report No. 340, Denver Wildlife Research Center, U.S. Fish and Wildlife Service.

Crop	Species of Birds Causing Loss	Best Estimate of Local or National Loss (Survey year) Cwt. (million)	$/Cwt	(million)	Loss @ 1973-82 Avg. Price ($ million)	References	Extrapolated U.S. Loss @ ($ million)	Source of Estimates
Grapes	Starlings, housefinches, house sparrows robins, waxwings, bluebirds	0.542	8.13 (1975)	4.4	5.7	DeHaven (1974a) Crase et al. (1976)	5.7	Objective survey in CA wine grapes & questionnaire survey in 13 States.
Peanuts, windrowed	Grackles, crows	0.0072	10.72	0.07	0.15	Mott et al.	1.5	Objective survey in 3 OK counties in 1969. National loss est. at 10X this loss.
Pecans	Crows, bluejays	0.016	35.00 (1974)	0.58	0.58	Murray (1975)	3.4	Objective survey of 4 LA parishes. National loss est. at 4X LA loss in 1974.
Rice, ripening	Blackbirds	0.39	3.89 (1968)	1.5	3.8	Pierce (1970)	7.6	Questionnaire survey in AR. National loss est. at 2X that of AR in 1968.
Rice, sprouting	Blackbirds	0.09	3.89 (1968)	0.4	0.9	Pierce (1970)	3.7	Questionnaire survey in AR. National loss est. at 4X AR loss in 1968.
Rice, wild	Blackbirds	0.0033	150.00 (1978)	1.5	1.5	Office Federal Register (1978)	1.5	Estimate by MN Dept. Ag.
Sorghum, grain,	Blackbirds & sparrows	1.2	4.83 (1974)	5.8	4.8	Knittle & Guarino (1976)	4.8	Questionnaire survey States in 1974.
Sunflower, ripening	Blackbirds	0.753	11.55	8.7	7.4	DeHaven (1982)	7.4	Objective survey in ND, SD & MN.
Vegetables sprouting lettuce & other vegetables d/	Horned larks blackbirds, starlings, & crowned sparrows	0.09 b/	6.93 c/	0.6	0.8	DeHaven (1974 b)	0.8	Questionnaire survey of 21 CA counties.
Wheat, sprouting	Starlings	0.13	3.75 (1977)	0.5	0.9	Dolbeer et al. (1978-79)	0.9	Objective survey in in TN & KY in 1977.

Appendix A. (cont'd)

Summary:

	Type of Survey		
	Objective	Subjective	Total
Ripening and Swathed Grains	18.8	34.5	53.2
Sprouting Grains	3.8	10.6	14.4
Oilseed	7.6	1.4	9.0
Fruits	16.7	1.9	18.6
Other Crops	1.6	9.2	10.8
Totals	48.5	57.6	106.1

a/ Extrapolation of fragmentry data made to obtain an estimate of annual loss to birds for all U. S. agricultural crops.

b/ 1982 price.

c/ Lettuce equivalent.

d/ Includes sprouting sugar beets.

PROBABILITY SURVEYS

Senator BURDICK. Mr. Kibler, we have a couple of questions for you. You indicated in your testimony several times that you are requesting an $800,000 increase in order to continue to shift major crop surveys to probability-based procedures. Please explain this probability basis?

Mr. KIBLER. Senator, the panel survey methodology served us very well for a number of years when farms were similar, and we didn't have the specialization present today. The current system consists of a panel of farmers who have reported to us over a long period of time, sometimes as many as 20 years, and we asked them specific questions. That panel doesn't necessarily represent a cross-section of farmers as we have today, but at least it has been a panel that gave us continuing information for a long period.

With specialization, and all of the changes that are coming along, even adjacent farms these days are very different. The probability sampling mechanism gives every farm or ranch a chance to be selected in this sample so it is a true representative cross-section of agriculture and then collected data from those selected can be used to compute sampling errors (reliability).

Our data collection system had been reviewed very carefully by an outside review panel of economists and statisticians. They just felt that if we wanted to continue to serve the agricultural industry better, we needed to make this shift to what really is a better, more reliable survey methodology.

STATE STATISTICAL OFFICE RELOCATION

Senator BURDICK. I wonder if you can provide the committee with the list of states in which you have an office, and also cover the states that do not have their own offices.

Mr. KIBLER. We will be glad to provide that.

[The information follows:]

State office list

Alabama
Alaska
Arizona
Arkansas
California
Colorado
Florida
Georgia
Hawaii
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maryland[1]
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire[2]
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
South Carolina
South Dakota
Tennessee
Texas
Utah
Virginia
Washington
West Virginia
Wisconsin
Wyoming

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[1] For Delaware also.

[2] For Maine, Vermont, Massachusetts, Connecticut, and Rhode Island also.

MOVING FARGO, N. DAK. OFFICE

Senator BURDICK. Recently I read a report from the National Agricultural Statistics Service that it is contemplating moving its office from Fargo, North Dakota, to Bismarck. If this is true, what is the status of this proposal?

Mr. KIBLER. We have some discussions underway with Agriculture Commissioner Kent Jones in Bismarck that would move our office from Fargo to Bismarck, to be housed with the State Department of Agriculture. It is a long-range effort we have had underway. We now have offices adjacent to 20 different State Departments of Agriculture around the country. When we are there, closer to the people who are working with the farmers, we get a lot of additional administrative data.

Secretary Jones has put together a proposal for the North Dakota Legislature asking for money for space, and we will continue to discuss this with him as this proposal progresses through the legislature there.

Senator BURDICK. In other words, this is a reality. Is it going to happen?

Mr. KIBLER. No, sir; it is not a reality. If the funding comes through the state, and we can work it out so that we have adjacent space, it is something that we would continue to work toward.

Senator BURDICK. I am not taking any side on the issue because I didn't know about it, but I do now. I wonder if you have taken into consideration the value of the institution we have in Fargo that is known as the North Dakota State University.

Mr. KIBLER. Yes, sir; we surely have, and we would continue to work closely with them.

Senator BURDICK. It is located in Fargo, and not in any other city in the state.

Mr. KIBLER. Experience has shown that we have a bit more in common in service to agriculture if we are affiliated closer with the State Department of Agriculture.

Senator BURDICK. I just thought that you ought to consider that before you make your final decision, that is all.

Mr. KIBLER. Yes, sir; I understand.

Senator BURDICK. Are you contemplating other consolidations?

Mr. KIBLER. Similar negotiations are underway to move the South Dakota office from Sioux Falls to Pierre and the Louisiana office from Alexandria to Baton Rouge.

Senator BURDICK. Are any of your activities funded by other than federal money?

Mr. KIBLER. All 44 state statistical offices operate under the memorandum of understanding or cooperative agreement with the state and are, therefore, jointly funded to serve both federal and state needs.

Senator BURDICK. What are they, and to what extent?

Mr. KIBLER. The value of the input from state cooperative activities was about $8.3 million for the last fiscal year. Generally, the purpose of the state funding was to supplement the federal statistics program so that additional data could be collected for county estimates for specialty crop and livestock items within the state. The individual state statistical bulletins are usually a result of this effort. By combining survey efforts for both state and federal needs, duplication in effort is minimized, and the response burden to the farmer is smaller than if separate state and federal surveys were conducted.

RENEWABLE RESOURCES EXTENSION ACT

Senator BURDICK. Since fiscal year 1980, the staff, under the Extension Service that had been working on natural resource programs, has increased by 50 percent. Yet, the fiscal year 1988 budget proposal would eliminate all earmarked funding for the Renewable Resources Extension Act.

Maybe you can answer this, Dr. Johnsrud. Would you please explain the justification for the elimination of funds as compared to the $2.3 million appropriated in fiscal year 1987?

Dr. JOHNSRUD. Mr. Chairman, that particular program fell into the same criteria as the other categorical funds relative to how we met some kind of a reasonable budget level here. There is considerable work going on in renewable resources across the nation in Extension Service.

It was an intensification, and obviously it will have an impact not to have it in there, but it does not mean the end of that kind of work in the states. It is simply that the added intensity will not be a part of it, unless they reallocate again as we mentioned earlier. It simply became a part of the criteria in deciding this difficult budget.

Senator BURDICK. But there will be a reduction of $2.3 million?

Dr. JOHNSRUD. Yes; we are proposing a reduction of $2.3 million.

Senator BURDICK. This is bound to result in some reduced operation, isn't it?

Dr. JOHNSRUD. Right, I am saying that it will result in some reduced operation, but there is other work going on in the states in addition to that. As I said before, any reduction in the budget is going to reduce this operation; there is no question about that.

Senator BURDICK. How many states are currently participating in the Renewable Resources Extension Act Program?

Dr. JOHNSRUD. Forty-three states.

Senator BURDICK. Are there other programs that provide private landowners assistance in managing and improving forest lands, rangeland, and fish and wildlife habitats?

Dr. JOHNSRUD. Yes, sir; the State Forest Service, the U.S. Forest Service, the various associations that are part of the Midwest and the West. There are several agencies and organizations that obviously have input.

SUBMITTED QUESTIONS

Senator BURDICK. Thank you.

I have additional questions to be submitted for the record, and they will be from the following Senators: Burdick, McClure, Kasten, Grassley, Bumpers, and Sasser.

[The following questions were not asked at the hearing but were submitted for response for the record:]

EXTENSION SERVICE

QUESTIONS SUBMITTED BY SENATOR BURDICK

PEST MANAGEMENT

Question: In its appraisal of the proposed Fiscal Year 1987 Budget for Food and Agricultural Sciences, the National Agricultural Research and Extension Users Advisory Board recommended continued funding for Smith-Lever 3(d) programs. Among these, the Board ranked as its highest priority pest management. Funding for pest management in both Fiscal Years 1986 and 1987 was appropriated at $7.2 million. Would you please explain the reason why the Fiscal Year 1988 Budget proposes to terminate this program, rather than consider it of the highest priority?

Answer: The termination of the Pest Management Program is the result of the elimination of specifically earmarked funding for all Smith-Lever 3(d) Programs, consistent with overall Federal spending reductions.

Question: How do pest management systems contribute to the reduction of input costs that is important to profitable farming?

Answer: The educational IPM programs conducted by Extension are largely responsible for the development and maintenance of agricultural production systems which reduce costs of production by elimination of unnecessary pesticide applications. In 1986, inputs from the States document agricultural profitability benefits in excess of $273 million because of IPM. A substantial portion is due to reduced production costs.

Question: Cotton pest management is an earmarked program in several cotton belt states. Would you please provide me with a listing of those states, explaining how pest management funds are allocated to those states and telling the subcommittee what alternatives the USDA offers if these Extension Service pest management programs are eliminated?

Answer: The states include Alabama, Arkansas, Georgia, Louisiana, Missouri, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, and Texas. The funds are allocated to these states according to a formula based on the acreage which suffered production losses due to boll weevils exceeding 5% reported by the National Cotton Council in cooperation with Cooperative Extension agents.

With the proposed elimination, Extension cotton pest management programs are expected to continue at a reduced level of activity. These decisions will be made at the local level as they set priorities for the use of non-earmarked funds.

PESTICIDE IMPACT ASSESSMENT

Question: What type of information is provided under the Pesticide Impact Assessment?

Answer: The type information provided under the PIA includes analyses of pesticide use and impacts of pesticide regulations on agricultural productivity, product supply and prices, and environmental issues. Additionally, information on defining and evaluating the benefits and risks of selected pesticides having critical agricultural and forestry uses is developed.

Question: To whom is this information provided?

Answer: This information is provided to the EPA for their use in the risk/benefit use evaluation of pesticides.

Question: Is it critical that the American farmer be made aware of this information about pesticides?

Answer: It is critical that the American farmers be aware of this information. The Extension Service provides educational programs to help farmers and others using pesticides in dealing with the highly complex and often controversial decision making process of pesticide use.

Question: Are there other sources of objective information about pesticides available to our farmers?

Answer: We believe there are other sources of objective information about pesticides available to farmers. This includes the agrichemical industry, pesticide applicator training programs and private consultants.

Question: The Pesticide Impact Assessment was appropriated at $1.6 million in Fiscal Year 1987. No one would dispute the value of this assessment to protect the quality of our nation's natural resources. If no funds were provided in Fiscal Year 1988 as the President's Budget recommends, how would this information be provided to farmers?

Answer: There are other sources of information on impact of pesticides available to the American farmer. Additionally, the State Extension services could continue placing priority on these efforts through their non-earmarked formula funds.

URBAN GARDENING

Question: How many cities are currently involved in the urban gardening program?

Answer: There are 21 cities currently involved in the program.

Question: Does this program help low-income residents in urban areas? In what ways?

Answer: The Urban Gardening program is targetted to low-income inner city dwellers. The program teaches participants how to grow and utilize produce and, thereby, improving their diet and nutrition. The program also teaches food preservation techniques. Another benefit is the appreciation for agriculture by that segment of the population which is most unaware of the industry.

Question: How many people does this program provide with supplemental produce?

Answer: There are 225,466 participants in the program which grow their own produce. The total number of people who benefit from supplemental produce is approximately the number of participants times the average size family in the cities. Therefore, about three-quarters to one million people benefit.

Question: What is the value of food harvested through the urban gardening program?

Answer: In FY 1986 the value of the produce harvested from Urban Gardening program plots was approximately $17 million.

1890 COLLEGES AND TUSKEGEE UNIVERSITY

Question: One of the few areas to receive an increase in the Extension Service Budget is for 1890 Colleges and Tuskegee University. The recommended increase is $1.4 million above Fiscal Year 1987's funding of almost $17 million. Would you please provide the Subcommittee with a detailed explanation of the uses proposed for this additional funding?

Answer: The additional funding would increase Federal assistance to Extension programs at the 1890 Colleges and Tuskegee University provided for by the second Morrill Act. Unlike the 1862 Institutions, the 1890 schools are almost entirely funded from Federal sources through the Extension Service. This increase will allow current efforts to continue and to help focus efforts on assisting small minority farmers and families and assuring acceptable response to increasing clientele needs.

Question: Would you please explain how you have selected these colleges to receive additional monies in light of the proposal to eliminate all earmarked programs under Section 3(d) of the Smith-Lever Act?

Answer: The bulk of the programs carried out by the 1890's and Tuskegee University comes from formula funds. This is unlike our 1862 land-grant institutions who receive state and county appropriations. Therefore, the increased funding level for these colleges will enable them to continue to conduct those programs that they deem of value to their clientele.

Question: Of the 17 colleges funded under the Extension Service program for 1890 Institutions and Tuskegee University, which have received funding for improvements to existing facilities during the past five years?

Answer: The 17 colleges have received funding from the Cooperative State Research Service for improvements and construction of research facilities. This totals $50 million in the last five years. The 17 institutions have not received any funding from the Federal Extension Service for facilities improvements.

Question: Is expansion or renovation of facilities at these colleges necessary? Please provide the Subcommittee with the status of facilities at each 1890 Institution and the Tuskegee University.

Answer: According to a survey initiated by the 1890 institutions and Tuskegee University on their own, around 70 percent of the institutions indicated the need for new building construction, while others indicated the need for renovation of existing facilities to add more public meeting places, as well as, establish demonstration centers.

FEDERAL ADMINISTRATION AND COORDINATION

Question: Please provide the Subcommittee with a list of the accomplishments and status of projects funded under Federal Administration and Coordination of the Extension Service in Fiscal Year 1986 and in Fiscal Year 1987.

Answer: The information follows:

> Farm Financial Management: For the past several years Extension has received funding of a farm and ranch management pilot project in Nebraska. Currently funded at $191 thousand, this effort provides the Extension Service participation in the Managing-for-Tomorrow program throughout Nebraska. This program has been successful in helping Extension clientele become aware of and to adopt better management techniques.
>
> ATTRA: Proposal for this project made in Fiscal Year 1987, was accepted, and funding approved.
>
> Technology Transfer Programs:
>
> 1986: Program of computer technology education and technology assistance to small local communities with the results of these experiences transferable to other communities. Extension is working with other state organizations to make state-of-the-art technology available to promote industrial development and improve productivity.
>
> 1987: Project seeks to identify industrial needs for new technology and to match existing technology from Federal labs and Universities with those needs, publicizes the program, employs a technology agent to identify needs and evaluate technologies, and explores market opportunities for new products. Activities include automation of assessment records and technical assistance programs.
>
> ORDP Grants: Projects include evaluating innovative technologies for potential marketability, technology assessment, financial assistance, and start-up support.

INTEGRATED REPRODUCTIVE MANAGFMENT

Question: In Fiscal Year 1987, $47,000 was provided through the Extension Service to conduct research on the reproductive systems of cattle. Would you please provide the Subcommittee with the status of this project?

Answer: The $47,000 allocated to the Nebraska Cooperative Extension Service since 1986, funds a project entitled "Nebraska Integrated Reproduction Management in Beef Cow Herds - A Demonstration/Education Program". Demonstration herds were selected and a list of management changes was developed and shared with each herd owner. After review with Extension specialists and county agents these practices were incorporated where feasible.

Benchline data for each herd and the first year's impact of the management changes have been compiled and shared with the participants. The computer models being developed based on this data can be expanded to other producers.

FARM SAFETY

Question: The Farm Safety Program is currently funded at $970,000. It is one of eight earmarked programs under Smith-Lever 3(d) that is slated for elimination in Fiscal Year 1988. In the Explanatory Notes that accompany the budget request, the Extension Service claims that "fatal farm accidents fell 11.5 percent." Would you please tell the Subcommittee for what period of time this statement applies, and what types of accidents have been prevented?

Answer: Since 1980, fatalities due to agricultural activities have decreased from 2,000 to 1,600 and injuries from on-farm accidents have declined from 200,000 to 170,000 reported. Although these figures are based on reports by States, it should be noted that while the number of farmers and farms has decreased, the total number of acres worked is fairly stable during his period. Additionally, improved technology in the design of farm equipment for safety purposes has contributed to the declining death and injury numbers.

Question: Is this fact attributable in whole or, in part, to the Farm Safety Program?

Answer: We believe that the educational programs development by the States for farm safety have had an impact on the public's awareness of safe farm operations. For example, the National Transportation Safety Board shares USDA's concern with regard to the safe movement of farm equipment on rural roads. Safety leaders have been working with youth on Hazardous Occupation Training Programs and, in several States, with Emergency Medical Technicians on such items as farm accident extrication. A reduction in farm fatalities is a remarkable achievement when one considers a recent study which pointed out that, while mining and agriculture are the two most dangerous industries, the Federal government spends over $188 per miner on mine safety and 32 cents per farmer on farm safety.

RENEWABLE RESOURCES EXTENSION ACT

Question: Since Fiscal Year 1980, the staff under the Extension Service that has been working on natural resource programs, has increased by 50 percent. Yet, the Fiscal Year 1988 Budget proposal would eliminate all earmarked funding for the Renewable Resources Extension Act. During Fiscal Year 1986, how many acres were treated under this program?

Answer: We do not keep records of the number of acres that landowners treat. We do have examples of the number of acres that are owned or controlled by landowners and others who participate in Extension programs. These examples include: an eleven county area in Alabama where 27,000 acres were reforested as a result of Extension programs; in Mississippi the landowners in the forestry program controlled more than 450,000 acres; in Missouri the forest acreage owned by landowners participating in a series of workshops exceeded 35,000 acres; as a result of Extension programs, 19 communities in Massachusetts implemented management plans on 48,000 acres of municipal watersheds that has generated more than $15 million in new revenue; in two Florida counties the number of seedlings planted in forest regeneration programs has increased by more than 200 percent; in Colorado more than 7,800 acres of weed or brush dominated range was treated and 1,050 acres were reseeded by landowners participating in a range improvement program and in Pennsylvania woodland owners participating in programs owned more than 305,000 acres of forestland.

Question: How many landowners were assisted, and in what states?

Answer: Currently RREA funds to support renewable natural resources programs are allocated to 43 States. Landowners are a prime target audience for Extension natural resources programs. Although we do not keep records on participation, we do have some examples of the size of audiences for particular programs. In Mississippi more than 5,000 forest landowners are involved. In Arkansas more than 100 landowners participate. In Pennsylvania RREA efforts reached 3,650 woodland owners; in Tennessee, 19 woodland owners' meetings in 23 counties involved more than 500 farmers; in Colorado more than 215 ranchers were involved; and in Oregon more than 1,000 woodland owners have been involved in small woodlot education programs.

Question: Please provide this information for the record, including the past three fiscal years.

Answer: We do not keep records of acres of land treated nor numbers of program participants.

Question: If all 50 states were to participate in the Renewable Resources Extension Act, what level of funding would be required based on Fiscal Year 1987 estimates.

Answer: Based on the formula determined through Congressional intent, the States estimate that $4 million would be needed for all 50 States to fully participate in the RREA effort.

FINANCIAL MANAGEMENT PROGRAM

Question: In each of the past two Fiscal Years, Congress has appropriated over $1.4 million for Financial Management Programs to provide guidance and counseling to distressed farmers to help them keep their farms. In each of the past two Fiscal Years, the President's Budget has recommended eliminating the Financial Management Program. Are you aware of other financial management programs that are in existence today?

Answer: The $1.4 million provides funding for special projects in approximately 23 States. It is by no means the total Extension effort in this arena and many States, including those who receive funds from this earmarked program, have reallocated and redirected resources to develop educational programs to address this issue.

Question: How many farmers has the Financial Management Program assisted in Fiscal Year 1986 and in Fiscal Year 1987?

Answer: The Financial Management program funded by 3d funds has gone for special projects which we use to develop and implement programs to meet the financial needs of American farmers. These efforts, as well as programs from other sources of Extension funding, have reached 90,000 farm families with intensive farm financial assistance. We estimate that approximately approximately the same number will be served in FY 1987.

Question: How many of these farmers have encountered business failure subsequent to receiving Extension Service assistance?

Answer: I cannot provide a precise answer to your question. We know we cannot save every farmer we work with. However, we believe we have performed a worthy service if we assist a farmer to recognize that his financial condition does not permit him to continue farming and aid him in making an orderly transition out of agriculture. In FY 1986, 10% of the farmers that Extension worked with on an intensive financial planning basis, planned an orderly transition out of farming. An additional 15% were uncertain as to whether they would continue farming but were not ready to scale down or leave their farms.

Question: As one of the eight earmarked Extension Service Programs recommended to be terminated by the end of this Fiscal Year, I am curious if you might tell me whether the Financial Management Program provides services that are duplicative of other Federal programs currently in place?

Answer: The special projects funded from this appropriation are not duplicative of other federal programs currently in place. However, other similar efforts are being conducted through Extension funding.

Question: Is termination of this program the answer to possible overlap, or would redirection of resources be a more favorable alternative from the point of view of a distressed farmer?

Answer: We do not feel that there is overlap with the special projects funded from this program. The funds have given us the opportunity to encourage and facilitate the redirection of other Extension resources into the financial management area. We anticipate that this will be continued by the States.

Question: Please outline for the Subcommittee the types of services provided and funding allocated under the Financial Management Program and under the Section 1440 Program.

Answer: Section 1440 funds were provided initially in the FY 1987 Budget and these programs will be getting under way later this year. Plans of Work include similar programs as in the Financial Management Program but with increased emphasis on nonfarm income alternatives for displaced farmers and on stress counseling for farm families.

Question: What innovative programs have been initiated under work plans submitted for approval under Section 1440 that were not previously in effect under the Financial Management Program?

Answer: Programs proposed for the Section 1440 efforts are not substantially different from those previously in effect under the Financial Management earmarked program, with the exception of the mental health outreach emphasis. The primary difference is the substantial shift toward nonfarm and alternative agricultural income sources for displaced and financially stressed farm families.

GENERAL

Question: Please explain for the Subcommittee how the determination was made to increase funding for the Cooperative Extension Programs at Land-Grant Universities by $7.8 million in Fiscal Year 1988.

Answer: The Administration, with expressed support from the State Extension Services, wants to continue to stress Federal support for Extension's formula funded programs under conditions of reduced Federal funding. The inflation adjusted level for this formula funding in 1988 permits a stable, consistent, dependable and reliable programming source to our State and county cooperators.

Question: It is my understanding that the Federal Government provides about one-third of the funding, with state and local funds paying a two-thirds share. What would be the amount of additional contributions from state and local governments under the President's proposal?

Answer: The basic legislative authority for Extension programs, the Smith-Lever Act, dictates that our land-grant cooperators match, for the most part, funds provided to them under Section 3(c) of the Act. In the past, it has been experienced that every $1 dollar of Federal funding under the formula, has produced $2 dollars of additional effect in the States and at the local level.

Question: Would their share of funding be increased?

Answer: In recent years the trend reflects that the Federal partners' share of the total Extension effort has been decreasing. In 1975, Federal Extension funds provided 40% of the total program; that has declined to the current 31%.

Question: What is the Extension Service doing to help farmers gain competitiveness through their business operations?

Answer: During the last several years Extension has reallocated and redirected its resources in a concentrated effort to assist the American farmer in dealing with the farm economic crisis. These efforts have produced programs that were specifically developed and delivered to the producers in order to analyse their current financial standing and to plan how to make their individual operations the most cost efficient based on their specific needs. These programs include improved production practices as well as, integrated system approaches, marketing, agricultural policy issues and financial managment efforts. In addition, the Cooperative Extension sysytem is implementing a national initiative on Competitiveness and Profitability of American Agriculture. Issues being addressed in this initiative were identified through a national forum and guidelines from this effort are being developed and implemented on a National, State and local level. Extension is helping catalyze and orchestrate this program development effort.

Question: Are these services important?

Answer: This is a very important effort. County Extension staff providing this assistance devoted 29 percent of their time to these activities during FY 1986. This compares to 12 percent of their efforts during Fiscal Years 1984 and 1985.

Question: If the President's Budget were adopted, how would farmers find and benefit from similar services?

Answer: The President's Budget only proposes the elimination of the earmarked funds for farm financial management efforts. The States, through their other nonearmarked formula funds would still be addressing this problem and developing and delivering programs to the farmers and their families.

EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM (EFNEP)

Question: Another one of the eight earmarked programs under Section 3(d) of the Smith-Lever Act that would be terminated under the President's Budget is the Expanded Food and Nutrition Education Program (EFNEP). In recent years, funding for this nutrition education program has come under close scrutiny by Congress. In each Fiscal Year, 1986 and 1987, EFNEP was funded at $57.6 million. Since the program began, how many households has the EFNEP Program reached?

Answer: As of March 1986 2.5 million program families have participated in the program representing 10 million family members. There are also a total of 6.4 million EFNEP youth who have participated in the 4-H youth segment of the program.

Question: Do EFNEP professionals continue to inform participants of their eligibility for Food Stamps?

Answer: Addresses and telephone numbers of local Food Stamp offices are provided to families to facilitate their participation in Federal Food Assistance programs.

Question: What coordination efforts are ongoing between EFNEP and the Food Stamp Program?

Answer: The majority of the States reported participation in interagency advisory groups and having the Food Stamp agency staff participate in EFNEP staff training. States have established referral systems in order to better serve the needs of families.

EFNEP professionals and paraprofessionals have participated in the Food Stamp Program's "Making Your Food Dollars Count" campaign to inform families about shopping wisely with Food Stamps.

Question: Are there any other nutrition education programs that serve as large a population of low-income households as EFNEP?

Answer: EFNEP is the only national nutrition education program which targets low-income families. Ninety-four percent of EFNEP families have income under $11,000, 67% have income below $6,200 and 30% have income less than $4,000. Sixty-one percent of families are from minority groups.

Question: Do any other programs offer basic nutrition education, food budgeting advice, as well as food preparation and storage information that EFNEP provides?

Answer: While the "Making Your Food Dollars Count" campaign is used as information on a national basis, we are not aware of any other national nutrition education programs that teach participants the food management skills necessary for making economical and nutritious food buys.

Question: How many professionals and paraprofessionals are currently involved in the EFNEP program?

Answer: Four-hundred forty-three (443) professionals and 3,339 paraprofessionals were employed in the program in FY 1986.

Question: What is the educational background of each?

Answer: The county professionals are home economists and 4-H youth agents having B.S. and M.S. degrees, while State Extension nutritionists and EFNEP Coordinators possess M.S. and Ph.D. degrees. Paraprofessionals involved in the Program are mostly former recipients of EFNEP and have received training from the Extension Service in delivering the program.

Question: Have EFNEP professionals noticed any significant trends in the diets of low-income households before and after their participation in EFNEP?

Answer: Families are reporting poor diets on entry into the program and improved diets at the time of graduation from the program. Only four percent of the families entered the program with adequate servings in each of the four food groups. At graduation 24 percent were consuming adequate diets. Most of the remaining participants improve their diet to some degree.

Studies of participants' food and nutrition practices show that information learned in EFNEP continues to be used after graduation from the program. A recent study has documented that these learned skills and practices are retained for at least five years.

SECTION 1440

Question: Section 1440 of the Food Security Act authorized funding for financially distressed and displaced farmers through matching and competitive grants programs. Eight States, including my home state of North Dakota, were selected to receive matching grants through Land-Grant institutions totaling $3.35 million in Fiscal Year 1987. The purpose of these grants is to provide a broad range of educational counseling services, including the development of both farm and non-farm income alternatives and planning, management and training opportunities in other fields. In what specific ways do you believe this may be accomplished?

Answer: The Section 1440 funds in Extension are targeted to just a few States and are, therefore, limited in their impact. Meanwhile, the total Cooperative Extension System has reallocated and redirected resources to meet this problem on a national basis. Section 1440 plans of work from the States contain a range of assistance activities that address pressing needs in the respective States. These activities generally include: farm financial management assistance; emotional stress counseling and stress management; referrals, as needed, to rural mental health treatment facilities; the organizing of community based peer group support networks' and assistance in skill assessment and job search activities for finding alternative, off-farm employment. Some State plans include work with the local community to help retain existing jobs or generate new non-farm employment opportunities.

Question: The Food Security Act authorized the Section 1440 programs for three Fiscal Years, yet the $3.35 million appropriations for Fiscal Year 1987 have hardly been allocated and, already, this program is slated for elimination. Of the five states receiving Federal matching grants to Land-Grant colleges, each was asked to submit a work plan to USDA by January 30, 1987. Have these work plans been approved, and have credit allocations been adjusted accordingly?

Answer: At this time, the work plans for these five States are being reviewed. Discussions are taking place with the States in order to finalize the plans to ensure they meet the objectives of the Congress in addressing this problem. Letter of Credit allocations will be adjusted when final approval is given by the Extension Service.

Question: Could you please provide the Committee with a breakdown of these adjustments by fiscal quarter for our hearing record?

Answer: All adjustments to the Letters of Credit will probably take place in the third quarter of the fiscal year. The distribution will be: Kansas, $498,127; Mississippi, $320,727; North Dakota, $359,201; Oklahoma, $411,527; Vermont, $186,423, and $480,000 each for Nebraska, Iowa and Missouri. Four percent has been retained at Extension Service, USDA, for administrative purposes.

Question: The purpose of Section 1440 was to create new programs to address the critical needs of farmers and farm families. If we do away with Section 1440 after such a short time, how would USDA meet these critical needs?

Answer: Several States have already taken steps to address these needs, both with State appropriated funds and with innovative collaboration between existing agencies. Cooperative Extension personnel have worked with State Job Training Partnership Act programs to help tailor job retraining to the specific needs of displaced farm families, and with State and area mental health agencies to increase their rural outreach and service delivery.

Question: Under what specific authority could counseling and educational needs of farmers seeking financial and management alternatives be provided?

Answer: These needs are now being addressed within the limit of available resources, through Cooperative Extension System farm financial management and family financial management programs funded, in part, under the authority of the Smith-Lever Act of 1914, as amended. They can continue to be addressed under this authority.

Question: Under what specific authority could these displaced from farming who require job search or retraining skills be helped?

Answer: The Job Training Partnership Act (JTPA), provides Federal funding for State and/or locally administered employment and training services aimed at re-employing those displaced due to new technology, foreign competition, or other structural changes in the economy. Legislation is being proposed within the Department of Labor budget to implement new workers adjustment assistance programs to meet the training and employment needs of all dislocated workers regardless of the reason for unemployment. Job search and retraining skills can conceivably be provided for displaced farmers through this JTPA program.

Question: Would such authority allow for the human resources services stipulated by Section 1440?

Answer: The JTPA Dislocated Worker Program is very flexible. Service provided displaced farmers can include personal counseling, skills assessment, job search, classroom or on-the-job training, transportation, and relocation assistance. Mental health outreach programs in rural areas can conceivably be provided by State and/or area mental health agencies. These agencies are partially Federally funded under the Department of Health and Human Services' Alcohol, Drug Abuse, and Mental Health (ADAMHA) block grant program.

BUDGET

Question: Dr. Johnsrud, would you please provide the Committee with the budget for the Extension Service programs that the Agency initially requested as well as the budget that the Department initially requested.

Answer: Extension Service initially requested $392,416,000 for FY 1988. The Department's request to the Office of Management and Budget was $339,422,000.

QUESTIONS SUBMITTED BY SENATOR SASSER

ATTRA

Question. Dr. Bentley, The Extension Service budget for Fiscal Year 1988 requests zero funding for the Appropriate Technology Transfer for Rural Areas program (ATTRA). As you know, this program is located at the Agricenter in Memphis, Tennessee. In Fiscal Year 1987 it will provide services saving millions of agriculture dollars through soil conservation, reduced use of fertilizer and pesticides and lower water usage.

Estimates from the National Center for Appropriate Technology indicate that ATTRA's services, if fully funded, can enable farmers to save: $2 billion annually lost through soil erosion; $500 million to $2 billion annually in reduced fertilizer use; $2 billion in reduced pesticide use; and 36 to 56 percent savings in water use.

For these goals to be achieved, however, it is necessary that ATTRA receive sufficient funding to establish a complete data base of up-to-date technological advances. It is essential that we begin initiating the technical assistance necessary to achieve these conservation measures. ATTRA can provide services that can save an amount substantially greater than its cost of operation. My question is, why has the Extension Service decided on zero funding for this program so soon after its inception?

Answer. The ongoing programs of the Cooperative Extension system address the same issues as this activity and we feel ATTRA is duplicative of Extensions efforts. This, plus the need to control the Federal budget deficit were the considerations in the Administration's request.

Question: Dr. Johnsrud, as you are probably aware, the ATTRA program sought $1.8 million in initial funding last year. After receiving only $500,000 in initial appropriations for 1987, your budget has requested no funding for the program in 1988. I am concerned that the Department of Agriculture is addressing this Program in the wrong manner. Rather than assessing the benefits this program could provide to the farming community, you would end the program only months after it begins its work.

This program has been strongly backed by the National Center for Appropriate Technology as well as conservation programs in states across the country. It could provide substantial savings through soil conservation, reduction in fertilizer and pesticide use, and reduced water use, but these savings can never be achieved if we abolish the program now. It is essential that we begin initiating such conservation measures as these. Why have you decided to end this program so soon after its inception?

Answer: The Extension Service has not requested funds for this project in FY 88 due to budgetary considerations. Extension's efforts through its ongoing programs and with our initiatives, now in place, will address the same issues.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

Question: Dr. Johnsrud, although I am very pleased to see the Department's budget request for Fiscal Year 1988 include increases for the Smith-Lever Section 3(c) formula grants, I am concerned that, once again, the total elimination of many important Smith-Lever Section 3(d) earmarked programs is proposed. Of particular importance in my state is the Expanded Food and Nutrition Education Program (EFNEP), which under your proposal, would be eliminated through a cut of $57.6 million. Arkansas has a very impressive success record with this program. In 1986, approximately 5,700 homemakers and over 3,700 young people participated. The great majority of these were in rural areas and had incomes of less than $6,200 per year. 63 percent were on food stamps. The State Cooperative Extension Service conducted testing of participants and maintained excellent records which indicated high rates of improved food knowledge, improved dietary habits, and improved food purchase practices. Because of these changes, participants extended their budgets by $813 per year each, which certainly means a lot to a family with a $6,200 annual income. Can you comment on the success rate of the program in other states and nationally.?

Answer: Evaluation studies have shown that only 4 percent of the families enter the program with adequate servings in each of the four food groups. However, at graduation, 24 percent were consuming adequate diets based on this criteria. Most of the remaining participants improved their diets to some degree. Other studies of participant's food and nutrition practices show that information learned in EFNEP continues to be used after graduation from the program. One recent study documented that these skills and practices continued to be retained five years after they were learned.

Question: In view of the fact that this program has a proven record for saving its participants money, thereby reducing their reliance on food stamps, wouldn't you agree that termination of the program isn't cost effective?

Answer: The program has and continues to be cost intensive due to the preferred one-to-one relationship of EFNEP worker to participants. The reason for proposing the elimination of earmarked funding for this and other Smith-Lever 3d programs is due to the ever tightening Federal budget constraints.

Question: Many volunteers are involved with the EFNEP program. Again, don't you believe that a program that enjoys such success through the efforts of a strong volunteer force should continue to serve as a prime example of cost-effectiveness?

Answer: There are 107,623 volunteers, who make a significant contribution to the overall program. In the EFNEP there are more than 243 volunteers per professional employee and 32 times as many volunteers as paraprofessional aides in the program. This is certainly an excellent way to make the program dollars go further. However, budget deficit considerations need to be addressed and are the primary reason for the funding levels in this budget request.

Question: You stated that some of the more important programs that were being proposed for termination could be carried on to a limited extent by some of the other continuing programs. Isn't it unrealistic to expect that a program such as EFNEP, which is active in every state, can be carried on without continued funding of its own?

Answer: Some of the program may be picked up by States in a limited number of sites. At the present time we estimate the States are contributing approximately $9 million to the EFNEP program in in-kind donations of services and facilities.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

Question: I would like to comment first on the reduction in funding for the Extension Service. Several of the reductions in services under the Smith-Lever Section 3d could cause problems for farmers who depend upon them. I refer mainly to the complete reduction in Pesticide Impact Assessment, Financial Management, Integrated Reproduction Management and the Rural Development Centers. All of these programs provide needed services to our farmers. How does the Administration plan to provide for these services without these funds?

Answer: The programs being proposed for decreases in the Extension Service budget are targeted, earmarked programs which addressed specific need and have, for the most part, been successful in addressing these problems and having these efforts conducted by the States in their regular on-going programs. The basic formula funded programs that deliver these efforts are proposed for increases in FY 88.

Question: Of great importance to me is the reduction in funding under the Grasshopper control program. In Idaho for the last three years all of the on the ground work with the farmers in managing the federal grasshopper program has been done by the Extension Service. The County Extension Agents have given more than just their regular time to fight these pests, they have given two entire summers. The funds for this program are extremely necessary. Our extension agents need a minimum level of funding to maintain the program. How does the Administration plan to operate this needed program in light of the elimination of funds?

Answer: The Extension Service has no specifically earmarked funds for a Grasshopper program in Idaho. The funding of that program is strictly discretionary by the State. If it continues to be a priority item for the State Extension service, it can be funded from other sources.

QUESTIONS SUBMITTED BY SENATOR KASTEN

SMITH-LEVER FORMULA FUNDS

Question: Dr. Johnsrud, I was very pleased to see that the Administration has recommended an increase of $7.9 million in Smith-Lever Formula funding. This is certainly a vast improvement over the last year's unrealistic proposals to cut this funding almost in half. My preference would be for it to be allocated among the states according to formula, along with the rest of the Smith-Lever money. Could you explain how this funding will be allocated?

Answer: The $7.9 million increase will be distributed to our land-grant cooperators under the formula provisions of the Smith-Lever Act. This provides for 20% to go in equal shares to all States, the remainder to be distributed based on the farm population and rural population of each State, as determined by the latest census, and that 4% be provided for the administration and coordination of the programs at the national level.

GROUNDWATER

Question: One of the most pressing environmental issues in Wisconsin is the question of groundwater contamination by pesticides. Research on the health impact of various pesticides and how they spread through the environment needs to be done, but there is also a critical need to minimize the risk of groundwater contamination by teaching farmers better management strategies for combating weeds and pests. Dr. Johnsrud, this is Extension's job. Can you describe the steps Extension is taking to help farmers minimize the threat to groundwater?

Answer: The Extension Service has been at the forefront of efforts to increase farmer and public awareness of the problems of groundwater contamination. Over 95 percent of this Nations rural residents depend upon groundwater for their drinking water supplies. Most of these supplies are rarely tested or treated. The Extension Service released a report in February 1986, entitled "Groundwater Education: A Challenge for the Cooperative Extension System." This document identified the need for educational programs to increase awareness and action about impacts of chemicals on groundwater quality. The Extension Service has also cooperated with several private organizations in producing the bulletin "Protecting our Groundwater: A Grower's Guide" and has coordinated the distribution of about 80,000 copies in the last 3 months. We have also identified "Water Quality" as a national priority initiative, based largely on public concern about groundwater. This national priority initiative effort will be helpful to the States as they redirect programs and efforts to address this problem.

INTEGRATED PEST MANAGEMENT (IPM)

Question: By way of follow-up, it seems to me that Integrated Pest Management (IPM) plays an invaluable role in reducing the use of potentially dangerous pesticides. In that context, I find it hard to understand why the Administration is proposing once again to eliminate the funds earmarked for IPM in Smith-Lever 3(d). Is it the Administration's view that this program has been ineffective? If not, is there any reason beside the need to reduce overall Federal spending for the proposal to terminate these earmarked funds?

Answer: The Administration does not view this program as ineffective. It continues to accomplish its objectives. The program is proposed for reduction, along with the other earmarked programs within Extension, in order to address the Federal Budget deficit problem.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

BIENNIAL BUDGET CYCLE

Question: Calls for budget reform are increasingly heard as budget deadlines are too often missed, important budget decisions are delayed, appropriation bills and other direct spending legislation are held up in committee, and omnibus spending bills take the place of timely and orderly consideration of individual bills. One procedural reform that is being considered is the two-year budget cycle where budget and appropriations matters would be considered in the first year, and authorizations and oversight would be undertaken in the second year. Would your department/agency favor a biennial budget process? What benefits would your agency achieve in a two-year appropriation cycle?

Answer: A biennial budget process would be desirable. It has the potential of greatly reducing the amount of time expended by the agency as a whole in formulating the budget. It would provide a period for reassessing budget decisions, program evaluation, and developing well thought out legislative proposals. Formulating budgets would be a more meaningful process with the availability of such reviews and information.

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: Approximately 70% of the total Extension Service budget can be considered as repetitious of past submissions.

Question: What difficulties can you foresee in preparing and submitting a two-year budget to the Congress?

Answer: We cannot see any difficulties in preparing and submitting a two-year budget to the Congress. To a great extent, the annual budgets submitted by most agencies are the exact duplicate of past budgets, but without the intensive reevaluation which is possible with a two-year budget cycle.

Question: If you oppose the biennial budget concept, please give this subcommittee your reasons why.

Answer: We do not oppose the concept at this time.

ECONOMIC RESEARCH SERVICE

QUESTIONS SUBMITTED BY SENATOR BURDICK

CONSERVATION RESERVE

Question: You indicate that you provided a lot of background and analytical framework for deciding what kind of land should be entered into the Conservation Reserve Program. To date, have you determined what the effect of the land being entered into the Conservation Reserve Program is and will be in the future? For example, have you projected and quantified the decrease in production that will result? How about the decrease in loss of soil?

Answer: We have analyzed the impacts of the CRP on commodity production, erosion, and commodity program costs (including deficiency payments, interest on loans, and disaster payments) under various implementation scenarios. We have estimated these impacts for each CRP signup and for a 40 million acre reserve. Based on the March, May, and August signups, a total of 15.8 million acres were bid but only 8.9 million acres were tentatively placed under contract. This participation was achieved at an annual rental cost of about $46 per acre (excluding cover establishment cost sharing) and with an erosion reduction of 25 tons per acre per year. By retiring this acreage, commodity program costs were reduced by $157 million or about $18 per acre. However, for the same level of government expenditures ($408 million), accepting bids on croplands with the highest level of erosion would have retired only 8.4 million acres with an annual rental cost of $48 per acre, reduced erosion by 31 tons per acre per year, and again provided $18 of commodity program cost savings per acre. Selecting bids with the highest potential for supply control cost savings would have retired only 8.3 million acres with an annual rental cost of $49 per acre, reduced erosion by 24 tons per acre per year, and provided $23 of commodity program cost savings per acre.

Question: What are the budget ramifications of the Conservation Reserve Program?

Answer: We have projected total CRP costs for FY 1986-91 (assuming 40 million acres are enrolled) of $8-10 billion (excluding bonus payments). Direct savings from reduced outlays on commodity programs could range from $2.5 billion to $3.5 billion. Indirect savings, due to market price effects, storage costs, and net outlays associated with reduced production range from $3.5 billion to $4.6 billion. Consequently, net CRP costs (outlays less savings) could range from $4 billion to $6 billion depending on the success of the reserve in retiring commodity program base acreages. The annual level of erosion could be reduced by 700 million to 900 million tons.

1985 FARM BILL

Question: Some argument is made that the marketing loan authorized in the 1985 Food Security Act is costly to the Government. Have you done any analysis of the marketing loan as implemented for various programs to determine what the cost to the Government is?

Answer: ERS has completed a study of the impact of marketing loans on U.S. program commodities, which concluded that (among other things) net marketing loan costs (gross outlays minus loan forfeiture and storage cost savings) for rice and cotton will exceed $700 million in 1986/87. If marketing loans had been in place for wheat, feed grains, and soybeans, total net costs would have exceeded $2.5 billion, and the per-unit cost of additional export quantities would have been very high in most cases. We will send you a copy of the full study as soon as it is published.

Question: If you compare and contrast the marketing loans with the normal commodity loan, under the commodity loan you get the commodity back although it may not be worth the value of the commodity back in cash, is there really any difference between the two in terms of cost to the Government?

Answer: With a nonrecourse loan, producers may forfeit their loans collateral (the commodity) to the CCC. Costs to the Government include payments to producers at the loan rate plus storage payments on the forfeited crop. Under a marketing loan, the Government allows producers to repay their loans at a rate lower than the original loan rate. The gross cost of such a program includes the per-unit difference between the loan rate and the loan repayment rate. Typically, the gross outlays for marketing loans would be more than for nonrecourse loans because the entire crop, rather than just that forfeited to the CCC, would be eligible for the payment.

Question: What are the storage cost savings?

Answer: We estimate that loan forfeiture and storage cost savings in 1986/87 will be $126.4 million for rice and $720 million for cotton. Had marketing loans been implemented for wheat, feed grains, and soybeans, total loan forfeiture and storage cost savings would have ranged between $211 million and $603 million, depending on one's assumptions. However, these savings would not be sufficient to offset the substantial outlays of marketing loans.

Question: Because of a $50,000 payment limitation in the 1985 farm law, many large farmers have splintered and somehow qualified for payments under several caps which in aggregate exceed the $50,000 limitation. What is the incidence of this phenomenon across the country?

Answer: No precise measure is available, but data from the Agricultural Conservation and Stabilization Service (ASCS) show about 100,000 more farms with wheat base in 1986 compared with 1985 and over 160,000 more corn farms. Not all of these are the result of reorganizations. Estimates of reorganizations based on data from ERS's Farm Costs and Returns Survey suggest that as many as 50,000 corn farms and a like number of wheat farms came into being as a result of reorganizations.

Question: What cost is it imposing on the federal government?

Answer: We don't have a firm estimate of the cost, but 100,000 reorganizations occurred to circumvent the payment limit and the average payment was $25,000, the cost would be about $2.5 billion in additional direct payments.

Question: What can be done to stem the reorganization of farms in order to circumvent the $50,000 payment limitation?

Answer: The problem of tightening the payment limit is complex. The issues that must be addressed include the specification of a careful statement of program objectives and the clear identification of who is to be considered an eligible payee. However, additional costs would likely be incurred in policing and enforcing the definitions of eligibility. ASCS is currently examining this problem.

GENERAL

Question: You indicate in your testimony, that ERS must face up to priorities because of the increased demand for your services. How does ERS set its priorities? In particular, how do you deal with the priorities when you are asked for services by Congress, by the Administration, and by the public?

Answer: ERS priorities are established based on a number of factors, including: internal assessments of the magnitude and significance of major issues confronting U.S. agriculture and rural areas; feedback from users of ERS data and analyses such as farm organizations, professional organizations, the National Agricultural Research and Extension Users Advisory Board; issues and needs addressed at user group meetings such as the listening sessions conducted around the country with the National Agricultural Statistics Service in February 1987; needs of other Executive Branch agencies, the Office of the Secretary of Agriculture, and Congress; and our cooperative/supportive role with land-grant universities. Each year ERS establishes priorities at an annual planning conference at which data and needs from many sources and groups are assimilated and discussed. Additionally, ERS must constantly be cognizant of the need to build its long-term research capital to address current and near-term problems and opportunities, and to anticipate emerging issues and develop appropriate research and analyses to address these issues. Thus, both current and longer term issues become part of our priority setting processes. The overall focus of ERS's programs is on a national and international issues. We establish our program priorities based on: (1) the relative potential impacts of the major issues, problems, and opportunities confronting U.S. agriculture and rural America, and (2) the Agency's current and developing analytical capability to provide sound analyses and information to the public and policymakers on major issues and developments.

The expressed needs of both the Congress and the Administration as well as our anticipation of those needs are an integral part of the priority setting process. However, when either the Administration or the Congress mandates studies or analyses, ERS is required to reallocate resources or request additional resources if the request entails a greater resource commitment than is available. Such requests often disrupt ongoing work. But as you might imagine, they have the greatest impact on intermediate longer term research. This is because of established deadlines for the products of our situation and outlook and staff analyses programs that are more difficult to alter.

ANIMAL DAMAGE CONTROL

Question: Do you have information on the monetary loss incurred by farmers from depredation by animals that are controlled through the animal damage control program?

Answer: Although the animal damage control program is administered by USDA's Animal and Plant Health Inspection Service (APHIS), ERS has collected data on sheep and lamb losses from a variety of causes, including predators. Data are available on the number of sheep killed by predators from 1961 through 1980. We testified on these data at the 1982 administrative law hearings regarding registration of compound 1080 for predator control.

In support of the Department's newly acquired responsibility in administering animal damage control programs, ERS has included questions on losses to predators and expenditures for predator control in a cost-of-production survey, now under way. These data will be available later this year, and we will send you a report at that time.

Question: Could you please provide the Subcommittee with a chart showing the damage from each of the animals on a state-by-state basis?

Answer: The most recent data available on sheep and lamb losses are for 1980. A copy of this information is provided for the record. These data will be updated on a multi-State basis later this year, and we will send the update to you as soon as it is available.

Question: For each of these assessments, do you also have information indicating how much farmers or citizens themselves pay to control the animals?

Answer: The ERS cost-of-production survey will provide information on animal damage control expenditures by sheep producers for such measures as shooting, baits, snaring, and other significant predator control practices, and we will send you a report as soon as the data are available.

Question: Could you please provide this information also broken down by the Agricultural interests protected?

Answer: The predator control portion of the cost-of-production survey is limited to sheep producers, but we will consider collecting the additional information in the future if feasible within the budget we have for the survey.

LAND VALUES

Question: Could you please provide me with a chart showing the trend in land values over the last 10 years by region in the country?

Answer: The tables that follow show farmland values since 1975 for each region in the country, first in current dollars and next after adjustment for inflation.

(The information follows:)

LAMB AND STOCK SHEEP LOSSES IN THE 17 WESTERN STATES, 1980

C. Kerry Gee*
Albert Madsen**

Coyotes were the major cause of 1980 docked lamb and stock sheep losses in the 17 Western States. Producers reported that more than 42 percent of all docked lambs lost and 14 percent of all stock sheep lost were to coyotes. Lambs and sheep killed, numbering nearly 400 thousand head, represented a multimillion dollar gross income loss to affected producers and the industry.

Most Sheep Production is in the West

The 17 Western States supported 83 percent of U.S. sheep production in 1980. According to the annual January survey by the Statistical Reporting Service (SRS) of USDA, lamb crop and stock sheep inventories were:

	17 Western States	United States
	(1,000 head)	
Lamb crop	6,436.0	8,245.5
Stock sheep one year and older	7,333.0	8,890.2

Source: *Livestock and Meat Statistics*, Supplement for 1980, Econ. Res. Serv., U.S. Dept. Agr., Stat. Bul. No. 522, Sept. 1981, page 10 inventory and page 21 for lamb crop. Also see *Meat Animals, Production, Disposition, Income*, USDA-SRS, MtAm 1-1(81).

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Most western sheep production is on rangeland, either fenced or unfenced, with limited producer control of the surrounding environment. Lambs and sheep are exposed to hazards ranging from killing winter storms, poisonous plants, disease, and a variety of predators. Many ranches operate in part on public domain, which may limit the range of management options for reducing losses even further than what is possible on private range.

Sources of Data

Loss estimates for 1980 are based on SRS stock sheep inventories, lamb crop, and total lamb and stock sheep losses as reported in *Livestock and Meat Statistics.* Data on causes of loss are from a special sheep 1980 cost of production survey conducted by SRS for the Economic Research Service in which producers reported causes of lamb and sheep loss.

Lamb losses in this report are lower than the Statistical Reporting Service 1980 published estimates, which include losses of lambs in commercial feedlots for all States and lambs lost prior to docking in the States of North Dakota, South Dakota, Kansas, Nebraska, and Oklahoma.[1] Complete data were not available on lamb losses which occur between birth and docking, therefore, no estimates were made of losses during this period.

Causes of Loss

Total after-docking lamb losses and stock sheep losses for 1980 were 1,411.4 thousand head (table 1 and appendix table A). Lamb losses totaled 662.4 thousand, or 10.4 percent of all lambs docked. Stock sheep losses were 749.0 thousand, 10.2 percent of the January 1980 inventory.

Predators caused most lamb loss after docking — 61 percent of all losses (table 2). Coyotes killed 43 percent of all lambs lost. Among producers surveyed, 52 percent reported some loss from coyotes, 12 percent had losses from dogs, and 15 percent were affected by other predators. Predators were also a problem to adult sheep, accounting for about 22 percent of all stock sheep losses. Again, coyotes were the most common predator with 34 percent of producers reporting this cause.

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[1] The Statistical Reporting Service, *Meat Animals, Production, Disposition, Income,* op. cit., estimated lamb loss at 1,012 thousand, and lamb crop at 8,246 thousand, resulting in a loss rate of 12.3 percent.

Table 1 — Total lambs and stock sheep lost, 17 Western States, 1980

Cause of loss	Lambs	Stock sheep	Lambs and stock sheep
	Thousand head	Thousand head	Thousand head
Weather, disease and poison plants	151.0	255.4	406.4
Dogs	31.1	24.0	55.1
Coyotes	283.6	111.6	395.2
Other predators	88.1	33.0	121.1
Other known causes	34.4	232.9	267.3
Unknown causes	74.2	92.1	166.3
All causes	662.4	749.0	1,411.4

Table 2 — Proportion of lambs and stock sheep lost, 17 Western States, 1980

	Lambs		Sheep	
Cause of loss	Proportion of lamb crop	Proportion of losses	Proportion of stock sheep	Proportion of losses
	Percent			
Weather, disease or poison plants	2.37	22.8	3.48	34.1
Dogs	.49	4.7	.33	3.2
Coyotes	4.45	42.8	1.52	14.9
Other predators	1.38	13.3	.45	4.4
Other known causes	.54	5.2	3.18	31.1
Unknown causes	1.16	11.2	1.26	12.3
All causes	10.39	100.0	10.22	100.0

Weather conditions (usually winter and spring snowstorms), disease, and poisonous plants are always potential problems for western sheep producers, and caused 23 percent of lamb losses and 34 percent of stock sheep losses in 1980. These causes were reported by most producers. Over one-half of producers reported losses of lambs and sheep for which the cause was unknown.

Economic Value of Coyote Losses

The dollar value of losses to coyotes can be estimated by two methods: 1) direct producer impacts, reflected in reduced gross income; and, 2) supply and price impacts at the industry level, measured by aggregate cash receipts. The first method quantifies loss of income to only those producers that have problems with coyotes. In contrast, industry impacts show affects upon all U.S. sheep producers of losses to coyotes in the 17 western states.

Estimated producer financial losses assume 1980 herd sizes are maintained. Stock sheep killed are compensated by holding additional lambs from market, which reduces potential lamb sales by the number of stock sheep killed in addition to lambs killed. Calculations are shown in appendix tables A, B, and C for lamb losses, sheep loss, and economic losses.

U.S. lamb and mutton slaughter for 1980 would have been 7.1 percent larger in the absence of losses to coyotes, resulting in a 3.0 percent lower national average lamb price — $61.69 instead of $63.60 per hundredweight.[2] With this price adjustment accounted for, producers in the 17 western States lost $21.9 million of gross income to coyote predation. Net industry effects totaled $10.3 million fewer cash receipts. Dollar loss measured at the industry level is much lower than if measured by gross income loss to western States sheep producers because of the higher lamb prices received nationwide from reduced lamb marketings. It should be emphasized that these two dollar estimates are not accumulative.

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[2] Based on demand model taken from Gee and Usmond, "Prices and Demand for Lamb and Mutton in the U.S.," Colorado State University Agricultural Experiment Station, Technical Bulletin No. 132, January 1978.

Appendix Table A — Lamb crop and lamb losses, 17 Western States, 1980

State	USDA Lamb Crop[1]	Lambs Docked[2]	USDA Lamb Loss[1]	Adjustment for loss on inshipments and loss before docking[3]	Lamb loss after docking
	1,000 head				
Arizona	200.0	200.0	15.0	1.5	13.5
California	725.0	725.0	90.0	6.2	83.8
Colorado	435.0	435.0	76.0	16.4	59.6
Idaho	450.0	450.0	33.0	2.5	30.5
Kansas*	145.0	137.5	19.0	10.1	8.9
Montana	390.0	390.0	59.0	.7	58.3
Nebraska*	112.0	104.1	20.0	10.5	9.5
Nevada	93.0	93.0	21.0	1.8	19.2
New Mexico	356.0	356.0	80.0	3.6	76.4
North Dakota*	173.0	165.1	20.0	8.3	11.7
Oklahoma*	62.0	58.5	8.0	3.8	4.2

Oregon	305.0	305.0	36.0	.5	35.5
South Dakota*	690.0	656.4	85.0	35.7	49.3
Texas	1,120.0	1,120.0	100.0	6.6	93.4
Utah	476.0	476.0	40.0	.8	39.2
Washington	64.0	64.0	7.0	—	7.0
Wyoming	640.0	640.0	65.0	2.6	62.4
Total	6,436.0	6,375.6	774.0	111.6	662.4

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[1] From *Livestock and Meat Statistics, Supplement for 1980*, Econ. Res. Serv., U.S. Dept. Agr., SB No. 522, September 1981.

[2] Lambs docked are same as lamb crop except in native states of North Dakota, South Dakota, Nebraska, Kansas and Oklahoma where lamb crop is based on lambs born. Numbers of lambs docked for these states are estimated by subtracting out lamb loss between birth and docking using loss percentages from the 1980 COP sheep survey.

[3] Losses on inshipments of lambs are estimated at 2.7 percent of total inshipments which is a typical loss rate for lambs in large finishing feedlots as reported in *Structure and Operation of the Colorado Lamb Feeding Industry*, C. Kerry Gee and Albert G. Madsen, Colo. State Univ. Exp. Sta., Tech. Bul. No. 121, January 1974.

*Native states

Appendix Table B — Inventories of stock sheep one year and older 17 Western States, 1980

State	Ewes	Wethers and rams	Sheep loss
		1,000 head	
Arizona	246	10	15
California	839	25	90
Colorado	425	13	40
Idaho	361	12	35
Kansas	125	6	8
Montana	400	13	62
Nebraska	90	4	15
Nevada	94	2	9
New Mexico	468	23	80
North Dakota	135	6	20
Oklahoma	58	3	6
Oregon	280	12	43
South Dakota	550	16	35
Texas	1,675	105	160
Utah	491	15	59
Washington	55	5	7
Wyoming	745	26	65
Total	7,037	296	749

Source: Livestock and Meat Statistics, Supplement for 1980, Econ. Res. Serv., U.S. Dept. Agr., SB No. 522, September 1981.

Appendix Table C — Calculations for estimating economic impact of losses of lambs and sheep to coyotes

1980 lamb and mutton slaughter	310 million pounds
Total lamb loss to coyotes	395.2 thousand
Average carcass weight	56 pounds
Total carcass weight of lamb loss	22.13 million pounds
Total slaughter with no coyote loss	332.13 million pounds
Percent increase in total slaughter	7.14 percent
Price flexibility	-0.42 percent
Expected percent price drop with no coyote losses	3.000 percent
Farm level lamb price with predator losses, 1980 annual average	63.60
Expected farm level lamb price with no coyote losses	61.69
1980 Lamb value/head with coyote losses (assume a 90 pound lamb)	57.24
Expected 1980 lamb value/head, no coyote loss	55.52
Total lambs marketed with coyote loss	6,741,000
Total lambs marketed with no coyote loss	7,136,200
Value of lamb crop with coyote losses $57.24 × 6,741,000	$385,854,840
Value of lamb crop without coyote loss $55.52 × 7,136,200	$396,201,824
Reduced industry income from coyote loss	$10,346,984
Gross income loss in 17 western States from coyote predation $55.52 × $395,200	$21,941,504

Land Values

AVERAGE VALUE PER ACRE, IN DOLLARS

Region	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Northeast	710	798	887	977	1112	1269	1365	1364	1343	1414	1390	1413
Lake	454	534	669	770	901	1065	1243	1234	1160	1099	874	702
Corn Belt	665	823	1098	1216	1412	1643	1776	1642	1482	1414	1055	902
N. Plains	232	279	325	342	412	485	535	547	528	499	383	323
Appalachia	487	566	650	737	894	1014	1093	1083	1082	1090	1006	984
Southeast	503	559	636	723	844	1005	1126	1095	1095	1094	1042	996
Delta	427	475	543	644	795	966	1146	1135	1039	1040	946	796
S. Plains	255	288	318	360	411	472	510	576	574	614	635	529
Mountain	129	149	174	193	231	284	308	325	314	319	286	248
Pacific	474	535	595	707	887	1037	1243	1346	1357	1361	1223	1105
U.S. AVG.	340	397	474	531	628	737	819	823	788	782	679	596

DEFLATED AVERAGE VALUE PER ACRE, IN 1977 CONSTANT DOLLARS

Region	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Northeast	800	845	887	918	951	951	919	850	805	811	769	764
Lake	511	566	669	724	771	798	836	769	695	630	484	380
Corn Belt	749	872	1098	1143	1208	1231	1195	1023	888	811	584	488
N. Plains	261	296	325	321	352	363	360	341	316	286	212	175
Appalachia	548	600	650	693	765	760	736	675	648	625	557	532
Southeast	566	592	636	680	722	753	758	682	656	627	577	539
Delta	481	503	543	605	680	724	771	707	623	596	524	431
S. Plains	287	305	318	338	352	354	343	359	344	352	351	286
Mountain	145	158	174	181	198	213	207	202	188	183	158	134
Pacific	534	567	595	664	759	777	836	839	813	780	677	598
U.S. AVG.	383	421	474	499	537	552	551	513	472	448	376	322

Question: You indicate that in 1988 farmland values "may" begin to level out and, eventually, rise. Is this your prediction?

Answer: Our most recent analysis, based on our best estimates of inflation, interest rates, and returns to farming, indicates that average U.S. farmland values will continue to decline through 1987. By the end of 1988, average U.S. farmland values may level out. But substantial regional variation can be expected and some individual regions may well level off during 1987. Farmland values in New England are expected to continue increasing during 1987 and 1988 as they have for more than 20 years.

Question: You also state that commodity program changes that diminish the earning opportunities for cropland may preclude recovery in land values. What are the program changes that you contemplate when making this statement?

Answer: None, We are merely informing policymakers that the return expected from farmland is the primary determinant of farmland values and that since 1982, government payments to farmers for participation in commodity programs have become an increasingly larger proportion of farm returns. In 1982, direct government payments accounted for 2.3 percent of gross cash income; by 1986, that proportion had increased to over 7 percent.

FARM COSTS AND RETURNS SURVEY

Question: The Economic Research Service (ERS) produces an Annual Report on the financial characteristics of U.S. Farms. Data for this report are based on the Farm Costs and Returns Survey (FCRS). The FCRS is an integrated survey which melds together multiple versions of a questionnaire to simultaneously obtain: production expenses, capital purchases, and other financial data; specific production practices data in sufficient detail to develop enterprise budgets for cost of production analysis; an type of operation and operating characteristics. The 1985 FCRS had about 23,000 original survey contacts, which yielded about 11,500 sample observations to generate the information contained in ERS's August 1986 publication Financial Characteristics of U.S. Farms, January 1, 1986. What are your plans for this year's FCRS (which is to be conducted during February and March 1987) in terms of the number of survey contacts you plan to make and the expected number of sample observations that will be the basis for this year's report? What will this year's FCRS cost? What is the estimated cost for the 1987 and 1988 FCRS?

Answer: This year's FCRS is expected to have approximately 23,500 total survey contacts. The exact number of contacts will remain slightly uncertain until the survey enumeration period had closed on March 28, 1987. This uncertainty occurs because the FCRS consists of both list and area frame samples. The list frame consists of known producers with certain crop and livestock production; sampling from the list ensures that all types of agricultural production will be included in our survey. This year, we sampled 15,390 list frame contacts.

The area frame portion of our survey is included to make sure that the survey is complete by giving any new producers or types of production that may not be present on the list a chance to be included in the survey. On the area frame portion of the survey, we interview resident farm operators who reside within an area of known geographic size. We expect to interview about 8,100 resident farm operators this year, but the final number will not be known until the survey closes.

Survey training schools were held in early to mid-February. Data collection has been underway since mid-February. Data from the first three computer edits runs indicate that response rates for this year's survey may be in the range of 74 to 78 percent. If this response rate holds for the remainder of the survey period and assuming an average number of duplications between the area and list frames, approximately 12,000 to 13,000 sample observations will be available for use in developing this year's Financial Characteristics Report.

This year's FCRS will cost ERS $2.5 million for data collection. In addition, USDA's National Agricultural Statistics Service (NASS) puts about $1.8 million of its budget into the FCRS. This does not take into account computer and staff time to analyze the data and publish the financial reports.

The $2.5 million that ERS transferred to NASS to conduct this year's FCRS underwrites the field enumeration and other direct survey costs. For future FCRS surveys, we can reasonably expect to increase by at least the amount needed to cover any salary increases for field enumerators. This increase would like be about $100,000 each year.

Question: If the survey sample was expanded, what kind of new information would ERS like to include in its financial report?

Answer: The Survey contains enough sample observations to develop statistically reliable estimates for major production regions, primary farm types, and various sizes of farms as measured by gross sales. These categorizations have proved very useful in helping people charged with making policy decisions that affect agriculture as well as the public to better understand both the depth and the distribution of financial difficulties across American agriculture. Key additions that could be made to our financial conditions work include:

State-by-State Analyses. Some crop and livestock enterprise combinations, soil productivities, weather, and other production attributes vary so widely across the Nation that constraining analyses of financial conditions to large geographic areas, such as the Northern Plains, leaves must to be desired. Focusing on a larger region can mask acute problems within a particular State or part of the region, as well as preclude any understanding of how a problem may have arisen in a specific area.

More Indepth Lender Analysis. Our analysis need to be able to focus more clearly on the amounts of debt that may be at risk of foreclosure or default. How much of this debt may have to be written off? Which lending institutions are holding this debt and how may various policy responses affect farm credit practices? Currently analyses of debt by lender can be undertaken. But analyses of debt by lender and by financial position of the lender's farm borrowers by area quickly encounter thin (statistically unreliable) data. An expansion in sample size would help overcome this problem.

More Indepth Analyses of Farm Enterprise Types by Size and Financial Performances Measure. This work would improve our understanding of which types of farm businesses are encountering financial difficulty--are they large or small farms? How are they adjusting their farm businesses? And, how are enterprises faring across areas of the country? These analyses are not only important in understanding current financial conditions, but could provide useful in assessing impacts of commodity programs adjustments.

Commercial Farms with Full and Part-Time Operation. At issues here is the financial position of farm operators who are primarily dependent on agriculture for their family livelihood as well as their business survival. Questions to be addressed include how are these farms businesses faring? And, how do they differ? A second set of concerns relate to those areas of the country that are primarily depending on agriculture for a major portion of personal income, particularly the 700 to 800 agriculturally-dependent counties. An expansion in survey size would enable analyses of farm incomes and financial well-being of the farm household to be more statistically reliable.

Farm Household Adjustments to Changes in Farm Profitability. How do farm families adjust not only their farm-related purchasing of operating inputs and capital items, but also their own family consumption? All our analyses have assumed a constant family living allowance nationwide. But, how does it vary and what effect does this have on farm survivability?

Economic and Other Reasons for Leaving Agriculture. This work would address why farmers have chosen to leave agriculture and what share of the decision is due to financial management issues.

Management Factors and Age Structure. This work would focus on age cohorts of producers with special focus on which are encountering the most financial difficulty and problems associated with successful entry into agriculture. The management analyses would attempt to identify production and other characteristics associated with financial difficulties.

Longitudinal Information. Current surveys are full probability samples each year, which means that the sample is completely redrawn in a random fashion. Thus, we may or may not talk to the same producers. Constructing a component of the survey as a panel, which could be revisited over time, would provide better information on how farm businesses adjust and what portion leave the sector and why.

Question: How large of a sample would be needed to produce this new information?

Answer: The above work, except for the longitudinal analyses, could be achieved with an increase in sample size of 10,000 to 20,000 contacts for the regular survey. The longitudinal work would be built as a component of the FCRS and would require approximately 2,500 to 3,000 sample contacts to provide statistically reliable data over time.

Question: What is the estimated cost to increase the FCRS sample size? How much additional funding would be needed to allow ERS to disaggregate the FCRS data so that state-by-state analyses would be possible? What plans does USDA have regarding an increased FCRS sample universe?

Answer: An additional $1.5 million would provide for expansion of the survey to a size that would provide not only for additional information on financial characteristics, but also State level reliability of data in approximately 15 to 20 major producing States as well as the 10 farm production regions. An additional $2.5 million would provide for state level reliability in approximately 25 to 30 States.

COMPETITIVENESS IN WORLD MARKETS

Question: In 1985, ERS initiated an in-depth agency-wide research project on U.S. agricultural competitiveness in world market. The overall objectives of this research effort was to identify and understand the natural, economic and political forces affecting U.S. agriculture's ability to compete. During fiscal 1986, ERS invested heavily in studying the competitiveness of wheat, with plans to use the results as a prototype for future studies on the competitiveness of other commodities. Similar studies were also planned on a country-by-country basis. What is the current status of the ERS Competitiveness Project? Have you completed the Wheat Prototype Study, and What can you tell us concerning its results?

Answer: The competitiveness project is comprised of several studies that relate to U.S. agricultural competition in world markets. For example, in addition to the wheat study, we recently completed an analysis of government interventions in the agricultural sectors by major trading countries. For each of these countries, we estimated the level of subsidies provided to producers and consumers. These subsidies have a direct effect on the demand for U.S. farm commodities and on our ability to compete with other suppliers. Development of a world trade modeling system is nearing completion. This modeling system will use these measures of government support to investigate the effects of trade liberalization, including modification of domestic farm policies, on U.S. agricultural competition in world markets. ERS also has research underway on global livestock/feed demand and supply relationships; the impact of Third World debt and various export enhancement programs on the demand for U.S. agricultural exports; and the interaction of major trading countries' basic resource endowments and government policies in influencing structural change and level of supply.

We have completed the wheat study. The United States is still the dominant wheat exporter, but market signals indicate that the United States is not now the world's most efficient producer and marketer of wheat. We are a high-cost producer and marketer relative to Canada and Argentina, mainly because of higher land values.

Question: Based on the results of the research project thus far, what would you identify as being the major factors influencing U.S. agricultural export competitiveness? Based on ERS's analysis of these factors, what can U.S. wheat farmers expect in the future?

Answer: In the short run, U.S. competitiveness is determined primarily by farm and trade policies, exchange rates, and weather. Farm policy, however, in terms of changes in target and support prices, influence export levels much more than do changes in the exchange rates. However, short-run changes in policy to enhance competitiveness may not be cost-effective from a total society standpoint and are not likely to resolve the basic, long-run factors affecting competitiveness.

In the long run, the improvement of U.S. competitiveness will depend on the mix and levels of land, labor, capital, and management resources, the prices paid for these resources, and the resulting mix and quality of goods produced to meet changing market conditions. A basic source of long-run competitiveness is enhancement of productivity through policies that encourage both public and private investment in science and technology. Although not directly related to agriculture, the President's 1988 budget initiative on competitiveness proposes a substantial increase in funding for basis research by the National Science Foundation, NASA, and the Department of Energy. Likewise, the United States should continue to strongly support public and private investment in agricultural research and technology transfer. Data on investments in agricultural research over the past two decades indicate that the rest of the world has increased public investment in research at a faster rate than the United States.

As I said, although the United States is still the domimant wheat exporter, market signals indicate that the United States is not now the world's most efficient producer and marketer of wheat. We are a high-cost producer and marketer relative to Canada and Argentina, mainly because of higher land values. Our research shows that the U.S. wheat farmers will likely continue to face competitive pressure from other major wheat-exporting countries.

Question: Has ERS conducted any other commodity or country specific studies as part of the ERS competitiveness project? What can we expect in the future?

Answer: During June 1986, ERS sponsored a Wheat Competitiveness Conference. A major objective was to review key factors affecting changes in the volume, value, and market of U.S. wheat exports. The conference was a step in our search to understand competitiveness in general and more specifically how the United

States competes in world agricultural markets. The proceedings of the Conference should be published shortly and will include summaries of 23 reports relating to competitiveness of wheat. Included will be information about the five major exporting countries -- Argentina, Australia, Canada, France, and the United States; and six major importing countries (or regions) -- Brazil, China, Eastern Europe, Mexico, Northern Africa, and the Soviet Union. Discussions of factors that cut across many countries such as trade negotiations, ocean transportation, macroeconomic linkages, and technology are also included in the proceedings. Additionally, comments from a panel of university and trade economists are included.

Also, the following wheat competitiveness reports have been published: The Value of the Dollar and Competitiveness of U.S. Wheat Exports; The Conduct of Wheat Marketing in North Africa; The Green Revolution for Wheat in Developing Countries, and Revealed Competitive Advantage for Wheat. Wheat reports in the editing-to-publication pipeline include: Patterns and Trade in World Wheat Competitiveness; Potential Growth in World Wheat Market: The Impact of Factors Underlying Demand; Shortrun Impact of U.S. Macroeconomic Policy on U.S. Wheat Market; Costs of Production and Marketing Wheat; Comparison of Major Exporters, and The Eastern Europe Wheat Market - Factors Affecting Supply, Demand and Trade.

In addition to wheat, we are conducting a major analysis of trade liberalization and government intervention in agriculture that complements the competitiveness work. ERS's work on measuring government intervention in agriculture allows us to compare the levels of support afforded producers of a wide range of agricultural commodities in many parts of the world. This is a major step toward quantifying the impacts of domestic and foreign agricultural policies on world commodity prices and world agricultural trade. Governmental policies are among the major factors affecting the ability of the United States to compete in world markets.

Question: U.S. wheat exports continued to decline in fiscal year 1986, why did this occur, and why aren't U.S. efforts under the 1985 Food Security Act concerning export expansions working?

Answer: The 1987/88 crop year is the first one in which overseas producers will be making their planting decisions and foreign governments making their policy decisions taking into account the price impacts of changes in U.S. farm policy embodied in the Food Security Act of 1985. Lower prices for foreign farmers will likely become more widespread, the agriculture-related budgetary burdens for foreign governments will likely increase, and imports will likely become more attractive to foreign buyers. We can already see indications of these things happening in some countries. Lower world prices have resulted in some adjustments in Argentina, including a decrease in export taxes. In light of the subsidies needed to move corn on the world market, South Africa is moving to cut price supports for corn production in excess of domestic requirements. Low prices in combination with an exchange rate less favorable to the European Community are forcing serious discussion of reform due to the resulting budgetary pressures. China has recently made unexpected purchases of corn. Australian barley production is down along with cotton. Preliminary indications are that Canadian wheat and barley production may begin to adjust downward in the coming year. The real indications will become visable when the planting decisions of farmers in the major feedgrain and oilseed exporting countries are revealed in the next few months. Over the next several years we will probably see more, and in some cases dramatic, examples of the world's adjustment to our lower export prices and to our promotion programs. But the process will take time and the ultimate effect on U.S. export growth will depend on how effectively the United States and other countries deal with a number of important global issues, such as Less Developed Countries debt, world economic growth, and freeing up international trade.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

FAPSIM Analysis

Question: I am particularly concerned over a report which, though not prepared by ERS, relied heavily on ERS FAPSIM analysis. The report is Agricultural Economic Report 562, Fuel Ethanol and Agriculture: An Economic Assessment. I would like to know the origins of the FAPSIM model. Did ERS economists develop this or was it contracted out to a private company?

Answer: The model was developed by ERS economists.

Question: Could the data used in this model, for this report be skewed so as to present only the most negative aspects of fuel ethanol?

Answer: The Food and Agricultural Policy Simulator (FAPSIM) model was constructed to provide a method for objectively quantifying economic conditions in the agricultural sector. The economists who run the model would have no reason to bias the results or provide information that was not believed to be factually correct.

Question: Could ERS do another model or another analysis using different data or updated modeling techniques to give a clearer picture of the economics of fuel ethanol?

Answer: The FAPSIM model is an accurate and consistent model that simulates how the agricultural sector of the economy functions. We have invested years into its development and we continue to invest money and staff to keep it adjusted for current economic and policy conditions. We believe that it is up to date.

Question: Could ERS provide technical expertise in modeling to help prepare another report on ethanol using updated information?

Answer: Yes, we would be glad to help. In fact, the Secretary has recently requested that ERS take another look at the economics of ethanol fuel. Hopefully, we will be able to obtain industry cooperation in determining accurate processing cost data.

Question: Could ERS provide me with a list of Land Grant Colleges, private researchers or organizations which could prepare an analytical study on the importance of the U.S. having a 10 billion gallon per year ethanol program?

Answer: The following organizations have some capability in modeling the agricultural production sector: (1) Chase Econometrics, 150 Monument Rd., Bala Cynwyd, PA 19004-1790; (2) Wharton Econometric Forecasting Associates, 1110 Vermont Ave., N.W., Suite 700, Washington, DC 20005; (3) Data Resources Inc., 1750 K St., N.W., 9th Floor, Washington, DC 20006; (4) Food and Agricultural Policy Research Institute, Center for Trade and Agricultural Policy, Department of Economics, Iowa State University, Ames, Iowa, 50011; and (5) Michigan State University, Department of Agricultural Economics, Agriculture Hall, East Lansing, MI 48824-1039.

Question: Could ERS complete this study without the help of the USDA's Office of Energy?

Answer: Yes. ERS could complete such a study without help from USDA's Office of Energy, but the Office of Energy's staff possesses specialized knowledge of the structure of the ethanol industry, which would be useful.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

BIENNIAL BUDGET CYCLE

Question: Would ERS favor a biennial budget process? What benefits would your agency achieve in a two-year appropriation cycle?

Answer: Yes, we would if it would save staff-years used in the development, documentation, and presentation of budgets and associated with yearend accounting, procurements and reporting.

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: Proposed redirections and initiatives usually account for 10 percent.

Question: What difficulties can you foresee in preparing and submitting a two-year budget to the Congress?

Answer: In inflationary times, costs could escalate and program delivery decline unless some provisions were made for increased costs. The process could lead to more supplemental/ amendment requests, thus the increased staff time could offset some of the savings in benefits.

Question: If you oppose the biennial budget concept, please give this subcommittee your reasons why.

Answer: In the long run, biennial budgets would be more beneficial to efficient operations in the Government then the current process.

National Agricultural Statistics Service

Questions Submitted by Senator Burdick

BARLEY SURVEYS

Question: Please provide for the subcommittee a list of the States in which you conduct a barley variety survey. Also provide the cost of each survey and the source of funding. Please provide this information for fiscal years 1986, 1987, and as proposed for fiscal year 1988.

Answer: Provided for the record is a listing of the costs of the Barley Variety Surveys conducted in 1986 and 1987, by States. These costs represent actual survey costs and include overhead costs and expenses necessary to maintain sampling frames.

State	Funding 1986		Funding 1987		Proposed 1988	
	NASS	Other 1/	NASS	Other 1/	NASS	Other 1/
California	$6,000					
Colorado			$3,000	$1,500	$3,000	$1,500
Idaho	6,000	$3,000	6,000	3,000	6,000	3,000
Minnesota		5,000		5,000		5,000
Montana		5,000		5,000		5,000
North Dakota		8,000		8,000		8,000
Oregon			3,000	1,500	3,000	1,500
South Carolina			4,000	2,000	4,000	2,000
Washington		3,000		3,000		3,000
Wyoming			3,000	1,500	3,000	1,500
	$12,000	$24,000	$19,000	$30,500	$19,000	$30,500

1/ Other - American Malting Barley Association, Montana Wheat Commission, North Dakota Barley Council, and Washington Barley Commission.

Question: I understand that you recently discontinued the quarterly report for on- and off-farm stock estimates for barley as well as the barley production forecasts reports for July and September. What has been the results of the discontinuation of these reports?

Answer: Producers and producer organizations in the major barley producing States have expressed concern about the absence of these data. It is difficult to point to specific results due to the loss of these data. A special October 10 Small Grains summary report has been developed to fill a portion of the industry's data needs. The barley industry has conducted its business with less information than in the past.

Question: What would be the cost of continuing these reports?

Answer: The barley production forecasts alone could be continued for about $15,000. However, as mentioned NASS now has the capability to conduct the small grain acreage and production annual survey on a probability basis during the first half of September, for publication about October 10 each year. This would reduce the need for the September yield forecast. Adding back the three quarterly stock estimates could be done for about $45,000 annually.

ELIMINATION OF REPORTS

Question: Have you eliminated other reports in the last two years? If so, please provide a list.

Answer: The only full NASS report discontinued in fiscal year 1986 was Commercial Fertilizers. Modifications in individual data series similar to those made for barley have been made for sorghum, oats, rye, weekly broilers, and monthly milk.

Question: Are you proposing to eliminate any reports in fiscal year 1988? If so, what are they?

Answer: If the Agency receives its budget as requested, NASS does not expect to eliminate any reports or data series during 1988.

IMPROVED METHODOLOGY

Question: Your budget shows an increase of $500,000 for an improved Agricultural Statistics Board methodology. This is roughly a 35 percent increase over what you had available for fiscal year 1987. Please describe what improvements are contemplated to justify this increase.

Answer: This is part of a continuing effort to improve the automation of the Agricultural Statistics Board (ASB). The improvement contemplated is to equip the Board with microcomputers and establish a software system and data base which would complement the implementation of composite estimates and time series analysis procedures. These changes were recommended by an outside panel of statisticians. This would effectively improve the capability of the ASB to evaluate all components of survey and administrative data more accurately, more efficiently, and on a more timely basis.

QUESTION SUBMITTED BY SENATOR MCCLURE

STATISTICAL SURVEYS

Question: I would only like to encourage the NASS to continue the excellent statistical work they now do. I am especially interested in continuing the white wheat and the pea and lentil surveys. Do you plan to continue these programs?

Answer: We plan to continue these surveys.

QUESTIONS SUBMITTED BY SENATOR GRASSLEY

ACCURACY OF REPORTS

Question: In the past there have been concerns voiced by some farmers that the NASS statistics were not always accurate and even though corrections were made later the damage had already been done to the market. Can you comment on that and tell me what steps have been taken to make sure that won't happen?

Answer: Many of the comments on our reports relate to forecasts of crop yields or of farrowing intentions. The final outcome of both items are affected by factors such as weather effects on yield and farmers' changes in actual farrowings that occur after surveys are completed. Records demonstrate that subsequent reports are just as likely to show increases as decreases.

Several steps have been taken to improve our survey procedures. The quarterly agricultural survey program being implemented will put major crop acreage and production surveys on a full probability basis for the first time. We have added an additional review step (an analysis package) to many of our major surveys. The analysis package provides a second opportunity to examine and verify any unusual report in the survey such as a very high or very low crop yield or an operation increasing its stocks of grain during the marketing season. These will improve our ability to interpret and analyze survey results.

AVAILABILITY OF INFORMATION

Question: What efforts do you make to let farmers know about all the information you have available that they could use?

Answer: Our managers and commodity specialists, at both the national and State office level, are charged with carrying out active promotional duties relative to NASS reports. These activities include, but are not limited to, speaking at local farmer meetings, appearing on radio and television, operating booths at State fairs, extensive field travel, etc. In addition, all farmers on our survey lists are annually provided with lists of available reports which they can receive free upon request. At the national level, the USDA's Electronic Dissemination of Information system is used to make NASS reports available on electronic media in timely fashion.

USER FEES

Question: Are you going to be charging user fees for information you publish? If so, could that possibly limit the farmers access to information?

Answer: NASS has been charging user fees for reports since 1982. However, our policy is not to charge farmers and agribusiness firms that provide or have potential of providing us with survey information. We feel this policy allows our information to reach all farmers who find it useful in their management decisions.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

BIENNIAL BUDGET

Question: Would your agency favor a biennial budget process?

Answer: Yes, we would favor a biennial budget.

Question: What benefits would your agency achieve in a two-year appropriation cycle?

Answer: Having funds guaranteed for two years would enable the Agency to make plans for a longer period of time. When NASS introduces new survey procedures, such as probability sampling, it is done over a period of years. Under an annual appropriation, we may be given the funds to start the project, but there is no assurance that additional funds will be provided in subsequent years. Under a two-year appropriation we would know what funding would be for at least two years and could plan accordingly. There would be advantages in planning major equipment purchase agreements and in negotiating research contracts. Because research is usually a lengthy process the two-year cycle would be especially helpful. Administratively, there would be some savings associated with formulating and presenting the budget and year-end closing procedures which currently must be done every year instead of every other year as they would be with a biennial budget.

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: The budget is currently 90 percent or more repetitious. Sometimes low priority items are deleted, which are replaced by new higher priority items.

Question: What difficulties can you foresee in preparing and submitting a two-year budget to the Congress?

Answer: Although there are definite advantages to planning in two-year cycles there are some disadvantages too. These would concern things such as pay costs and legislative changes which could not be anticipated two years in advance. Unanticipated needs would lead to additional budget supplementals and amendments which would offset some of the administrative savings associated with a two-year budget.

Question: If you oppose the biennial budget concept, please give this subcommittee your reasons why.

Answer: Even though there are some disadvantages, we are generally in favor of the biennial budget concept.

SUBCOMMITTEE RECESS

Senator BURDICK. This concludes today's hearings. We appreciate your having been here today to share with us the concern over the fiscal year appropriation for 1988 for the Department of Agriculture. The next hearing will be held on Monday, March 9, at 2 p.m., in this same room. At that time, we will hear from representatives of the Agricultural Research Service, and the Cooperative State Research Service. Until then, the committee will be in recess.

[Whereupon, at 11:40 a.m., Wednesday, March 4, the subcommittee was recessed, to reconvene at 2 p.m., Monday, March 9.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

MONDAY, MARCH 9, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2:05 p.m. in room SD–138, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Stennis, Cochran, Sasser, Harkin, and Grassley.

DEPARTMENT OF AGRICULTURE

STATEMENT OF ORVILLE G. BENTLEY, ASSISTANT SECRETARY, SCIENCE AND EDUCATION

ACCOMPANIED BY ROBERT E. SHERMAN, DEPUTY BUDGET OFFICER

AGRICULTURAL RESEARCH SERVICE

STATEMENT OF TERRY B. KINNEY, ADMINISTRATOR

ACCOMPANIED BY DR. CARTER, ASSOCIATE ADMINISTRATOR

INTRODUCTION OF WITNESSES

Senator BURDICK. The committee will please come to order. Today, we are continuing our hearings to review the fiscal year 1988 budget proposals from the Department of Agriculture. Today, we have before us representatives from the Agricultural Research Service and the Cooperative State Research Service in order to review their respective budgets.

With us today is Dr. Orville Bentley, Assistant Secretary for Science and Education; Dr. Terry Kinney, Administrator of the Agricultural Research Service; Dr. John Patrick Jordan, Administrator of the Cooperative State Research Service; and Bob Sherman, Deputy Budget Officer.

OPENING REMARKS

Agricultural research provides the backbone for agricultural productivity in this country. Without the advancements that we have seen in the past and the continuing achievements we foresee, the productivity of agriculture in this country would suffer tremendously.

The budget proposal for the Agricultural Research Service is $537,114,000. This compares to the enacted level for fiscal year 1987 of $499,664,000. Almost $16 million of that increase is to annualize the fiscal year 1987 pay costs and compensate for increased costs associated with the Federal Employees' Retirement System.

An initiative to expand the germplasm collection, maintenance and evaluation programs, is requested at a cost of over $7 million. The budget also includes a little over $2 million for research to decrease fats in beef, pork, lamb and poultry.

The Agricultural Research Service carries out its activities at 133 field locations managed by 11 area offices, as well as the central office. It uses over 8,000 employees in its work.

The Cooperative State Research Service is the prime vehicle to integrate research activities outside of the federal government into the agricultural scene. CSRS assists state institutions in the conduct of agricultural research through the state agricultural experiment stations of the 50 states and territories, as well as by the schools of forestry, the 1890 land-grant schools, as well as other institutions.

The budget for the Cooperative State Research Service is requested at a total of $240,270,000. This level compares with the fiscal year 1987 enacted level of $303,373,000. The reduction is highlighted by the elimination of all of the special research grants; animal health and disease research; grants to upgrade the 1890 land-grant college research facilities; the Research Facilities Act funding; as well as the forestry competitive grants funding.

In addition, the budget proposes significant cuts in the higher education program. As partial offset, the budget proposes a 4.5-percent increase in payments under the Hatch Act for payments to state agricultural experiment stations and a 9.5-percent increase in the Competitive Research Grants program. CSRS only has approximately 165 employees but serves more than 12,000 scientists in the university system of the United States.

On behalf of the subcommittee, I wish to welcome each of you here today. We have your statements which will be made a part of the record, and you may summarize them and add any additional comments you would like to make.

Welcome.

Does the Senator from Iowa have a comment to make at this time?

Senator GRASSLEY. Mr. Chairman, I don't have an opening statement, but I do have some questions. I may just submit the questions in writing. I am going to wait a few minutes here before I decide if I have to go. But if I do, I may submit some in writing.

Senator BURDICK. Welcome to the Senator from Mississippi. I recognize you.

Senator STENNIS. Thank you very much. I am delighted to be here, and I am looking forward to the testimony and the remarks. It will be worthwhile, too.

Senator BURDICK. The panel may proceed now in any way they wish.

STATEMENT OF DR. BENTLEY

Dr. BENTLEY. Thank you, Mr. Chairman.

At the first meeting of your committee, I submitted a statement which was made a part of the record. I will just make a few references to that statement today again.

Senator BURDICK. I might say that the full statements of any of the witnesses will be made a part of the record in full. So you may summarize, if you wish.

Dr. BENTLEY. Thank you. Today, I will take from that statement a few comments on research. At our last meeting, I discussed the Extension Service budget and made reference to that during my few opening remarks.

We are pleased that we have a budget of $1.1 billion for this year to be considered by the committee as they review and go through the budget process. We had to make a number of decisions, as I am sure my colleagues will point out when they make their individual presentations.

OFFICE OF AGRICULTURAL BIOTECHNOLOGY

I would like to touch on just a few topics. One of the areas that is getting a great deal of attention and one that is discussed is biotechnology and its application to agriculture and its importance to the future competitiveness of U.S. agriculture.

The department, under Secretary Lyng's leadership, is moving ahead to establish guidelines for the use of research for biotechnology. He has directed we do this. He has established an Office of Agricultural Biotechnology. This office has been delegated full responsibility for the coordination of the policies and procedures regarding biotechnology.

Dr. Jordan will be making reference to this office in the CSRS budget request.

GERMPLASM RESEARCH

You mentioned in your opening statement the emphasis that the Agricultural Research Service is placing on germplasm. I am pleased to say that we want to develop a program that will meet the needs of our ongoing agricultural research activity, especially in the area of crop production, and also help us move ahead when we begin to apply some of the newer techniques that are available to us through modern biology and biotechnology.

When Dr. Kinney makes his presentation, he will talk about the increase in the budget for the germplasm program and the need for a new seed storage facility and laboratory at Fort Collins, CO.

COOPERATIVE RESEARCH

As far as university research, primarily, we are talking in terms of the cooperative state research service program, and the state agricultural experiment stations. Before I make any comments on university research there, I want to say that we have had a very successful and significant centennial celebration of the signing of the Hatch Act on March 2 and 3 of last week. This great system was put in motion 100 years ago through an action of Congress under the leadership of Congressman Hatch from Missouri.

In the 1988 budget, we will be proposing to focus our university research budget on formula support for the land-grant system and the highly successful competitive research grants program. We propose to increase basic formula support under the Hatch Act by a modest 5 percent, the first increase, though, since 1985. These funds will continue to provide a stable source of research support to the states and have resulted in innumerable significant advances over the 100-year history of the program.

Also, recommendations are included for support of the 1890 colleges and for the forestry formula program under the McIntire-Stennis legislation. Support for the 1890 programs, which focus primarily on concerns of minority and small farmers, remains a high priority of the Department. In addition to the formula funding increases, our priority in the area of small-scale farming is reflected by the recent establishment of an Office of Small-Scale Agriculture within CSRS. This office will be responsible for working with other agencies to focus resources on issues related to small-scale farmers and rural development.

Another area I would like to touch on for just a moment that will be discussed in greater detail in the CSRS budget has to do with the establishment under the competitive grants program of centers for plant science and technology. We are requesting $3.5 million for our share of a jointly sponsored program involving the National Science Foundation and the Department of Energy. Funding for research in the basic plant sciences has lagged far behind the level needed to support advances through biotechnologies and other applications. The results of this research will be crucial in our ability to deal with emerging crop production problems related to water shortages, disease and insect infestations, chemical residue concerns and other issues that are facing farmers. Through this coordinated approach, we intend to mobilize resources and the expertise of three federal agencies to address issues in plant sciences through the establishment of these centers. The centers will also be deeply involved with universities and with the private sector. The planning for these activities will be an important facet of establishing this particular program.

ALTERNATIVE CROPS

These are the highlights that I wanted to touch on perhaps with one addition. We want to give emphasis to the progress and development of alternative crops. Through an agreement with the Defense Department, we are managing a research and development project on guayule, a domestic source of rubber. We are making progress, and our private sector cooperator will be operating a pilot processing plant beginning next year.

On another front, we are working with private concerns to demonstrate the feasibility of producing kenaf, an annual fiber crop as a pulp source for newsprint production. Responsibilities for developing this new crop in the southeast as a substitute for imported newsprint appears very promising.

PREPARED STATEMENT

These are just two products which have good potential for profitable new ventures for agriculture. My colleagues will expand on these alternative crops and their development, or we will respond to questions.

Mr. Chairman, that concludes my remarks.

[The statement follows:]

STATEMENT OF DR. ORVILLE G. BENTLEY

Mr. Chairman and members of the Committee, I appreciate this opportunity to present an overview of the 1988 request for the science and education programs of USDA. Targets established in the Gramm-Rudman legislation have resulted in a number of very difficult choices in formulating budget proposals. I am pleased to report, however, that despite the lower overall deficit target, our science and education budget is higher this year than the request I presented a year ago. In total, we are requesting $1.1 billion, or about $120 million less than our current estimate for 1987 appropriations.

As in prior years, we are proposing the elimination of certain earmarked programs which can be addressed through other sources if accorded a high priority by the States. Consistent with past and current Administration policy, our request places a high priority on support for basic scientific research which will form the basis for future developmental advances crucial to the competitiveness of American agriculture. Our 1988 science budget reflects a careful balance of programs in the various disciplines vital to enhancing the competitive posture of American farmers.

BIOTECHNOLOGY

Advances resulting from the application of biotechnologies will clearly be a major factor in assuring American agricultural competitiveness into the future. During the past year we've made significant progress in establishing a framework for the handling of biotechnology issues within the Department. Proposed research guidelines were published in June. Effective July 14, 1986, Secretary Lyng established an Office of Agricultural Biotechnology(OAB), whose director reports to me. This office has been delegated full responsibility for the coordination and implementation of policies and procedures regarding biotechnology.

For 1988, we are proposing a direct appropriation of $250 thousand to fund the operations of the OAB on a direct, stable basis. As the Committee knows, the products of biotechnology have been an important part of man's existence and culture for centuries, but only recently have we been able to harness these processes in specific, unique ways to produce innovative new products. However, the full development of this potential in the U.S. depends on our diligent pursuit of research and regulatory programs to support and nurture this developing industry. The OAB will provide the focal point for industry and academia for contact with USDA in biotechnology-related concerns. I urge the Committee to support our modest proposals in this area.

PLANT GERMPLASM

Support for biotechnology will be a hollow gesture without the basic materials needed by scientists to develop new and improved products. One of the most important of these inputs is genetic diversity. ARS is again proposing an increase in the area of plant germplasm to assure the availability of the genetic materials vital to crop plant improvements. Not one major crop plant is native to the U.S., making us particularly vulnerable to natural catastrophes resulting from a lack of diversity. An increase of $7.3 million is proposed to increase the collection and characterization of germplasm to enhance its usefulness to scientists. A related item proposes $1 million to fund the planning of a new seed storage lab in Ft. Collins, Colorado. As you know, this is the first facility request proposed by ARS in nearly ten years. Our proposal involves the construction of new seed storage vaults and renovation of the existing building to provide a modern long-term germplasm storage facility--the only one in the U.S. Our plan has the strong support of the Colorado State University, which is providing the land for the new building and will continue to provide excellent program support.

UNIVERSITY RESEARCH

Before I review our 1988 proposals for cooperative research, I want to recognize the centennial of the Hatch Act, enacted March 2, 1887, which established our system of experiment stations at the land-grant universities. We continue to look to this system as a key factor in developing new technologies and expertise in the agricultural sciences. For 1988, we are again proposing to focus our university research budget on formula support for the land-grant system and the highly successful competitive grants program. We propose to increase basic formula support under the Hatch Act by a modest five percent, the first increase since 1985. These funds continue to provide a stable source of research support to the States and have resulted in innumerable significant advances over the 100 year history of the program. Support for the 1890 Colleges and the forestry formula program would be increased by like amounts.

Support for the 1890 programs, which focus on primarily on concerns of minority and small farmers, remains a high priority of the Department. In addition to the formula funding increases, our priority in the area of small-scale farming is reflected by the recent establishment of an Office of Small-Scale Agriculture within CSRS. This office will be responsible for working with other agencies to focus resources on issues related to small-scale farmers and rural development.

SCIENCE AND TECHNOLOGY CENTERS

Our proposal also contains an increase of nearly 10 percent in the highly successful competitive grants program, which continues to receive many more meritorious proposals than can be funded. The increase will allow us to fund our share, about $3.5 million, of a $10 million program of plant science research to be jointly funded and operated with the National Science Foundation and the Department of Energy. Funding for research in the basic plant sciences has lagged far behind the level needed to support advances through biotechnologies and other applications. Results of this research will be crucial in our ability to deal with emerging crop production problems related to water shortages, disease and insect infestations, chemical residue concerns and other issues that are facing farmers. Through this coordinated approach, we intend to mobilize the resources and expertise of three Federal agencies to address issues in plant sciences through the establishment of science and technology centers on a competitive basis. Experience from the successful engineering centers operated by the NSF will be applied here. Active involvement of the private sector will also be an important feature of the centers.

EXTENSION

I am pleased to report that our Extension request for 1988 represents a significant increase from last year's proposal. Our budget would provide the first increase in formula funding under Smith-Lever 3b+c since 1985 and would provide a five percent level of real growth for the 1890 institutions.

As you know, there have been a number of reports in recent years whcih have examined the status and role of the Extension system. Just last year the Office of Technology Assessment issued a report on the impact of new technology on farming, including the effects on the extension programs. Extension has initiated a process to examine priorities for the system. Representatives from commodity organizations, producers, agri-business, extension, research and government are all involved in identifying priorities which will provide a framework for extension to reorient its programs to meet the current and emerging needs of agriculture and rural America. Strenghthening and updating extension programs to enhance profitability and competitiveness of agriculture is one of the issues being developed. Another is focusing on the changing needs of rural communities to orient extension rural development resources and talents to the pressing revitalization needs of those areas.

NATIONAL AGRICULTURAL LIBRARY

Although smallest in terms of budget, the National Agricultural Library is contintinuing to play an important role in information dissemination. NAL is continuing to fund a number of innovative projects in information technology development, cooperation with Land-Grant libraries to reduce duplication of services, creation of information centers to focus on current topics and upgrading of information systems within NAL to better serve users. To continue these efforts and assure adequate funding for urgently needed preservation and acquisition efforts, we are proposing to increase the NAL budget by $1.3 million, to $12.4 million.

ALTERNATIVE CROPS

Mr. Chairman, before I conclude my statement, I would like to update the Committee on some exciting progress in the development of alternative crops. Through an agreement with the Defense Department, we are managing a research and development project on guayule--a native source for natural rubber. We are making progress, and expect that our private sector cooperator will be operating a pilot processing plant beginning next year. On another front, we have been working with a private concern to demonstrate the feasibility of producing kenaf--an annual fiber crop--as a pulp source for newsprint production. The possibilities for developing this new crop in the southeast as a substitute for imported newsprint appear very promising. These are just two projects which have a good potential for profitable new ventures for agriculture.

This concludes my prepared remarks. The individual agency administrators will be providing additional details on their budgets and accomplishments during the past year.

REMARKS OF DR. KINNEY

Dr. BENTLEY. I would now like to turn to my colleagues, if I may, to have them make a presentation. On my right is Dr. Kinney, Administrator of ARS; Dr. Carter, Associate Administrator, and I will turn to my colleagues on my left a little bit later when they are to present their statements.

If I may call on Dr. Kinney at this time for the Agricultural Research Service.

Senator BURDICK. Thank you, Dr. Kinney.

Dr. KINNEY. Thank you, Dr. Bentley, Mr. Chairman.

I would like to add that I have my Deputy for National Programs Staff, Dr. Army, here; Dr. Laster and Dr. Knipling and his staff, and John Victor, my Budget Director.

We are pleased to appear before you again this year to present the Agricultural Research Service's budget recommendations for 1988 and to report on the progress that we made during the past year.

As this committee is aware, the primary aim of our research is to solve problems that confront American agriculture today. Accordingly, we plan our research projects carefully and in consultation with representatives of farm and ranch and commodity organizations and with environmentally concerned groups like the National Association of Conservation Districts.

We also work closely with leaders of USDA action agencies including groups like the Animal and Plant Health Inspection Service, the Food Safety Inspection Service, Soil Conservation Service, and many others.

In addition, we consult regularly with industry and industry groups involved in agriculture. We hold face-to-face conversations with them regularly. Next May, for example, this coming May, we plan to meet in

Washington with upward of 150 different company representatives from agriculture.

We hold many discussions during the year with Members of Congress about agricultural problems in their states and districts, and cooperation with our colleagues at the State Agriculture Experiment Stations and many other university departments is a day-to-day way of life for our research and our research managers.

All of these consultations help ensure that our research meets the practical high-priority needs of agriculture in the United States. For example, we conduct research to encourage greater exports of U.S. agriculture commodities to foreign countries.

DEVELOPMENT OF NEW PRODUCTS

We are developing new products and processes to utilize surplus farm commodities. Starch from surplus corn, for instance, has been incorporated into a black plastic mulch so that it will biodegrade at the end of the growing season and thus serve the purpose but not cause a pollution problem.

We have devised an instant custard product from rice flour and nonfat dry milk. Our other recent discoveries that have attracted the interest of industry and agriculture processors include a few things like:

Improved thermal fabrics that warm you when it is cold, and they cool you when you are hot, a rather surprising development;

Explosion puffdried mushrooms, carrots, apples, celery and blueberries that retain flavor and texture indefinitely, they could be easily stored and could become export items;

We have developed new compounds to repel cockroaches;

A new way to preserve cattle hides in about an hour without salt, compared with 12 hours from the commercial brine method now in use.

We have developed many new insect pheromones to attract pests to traps.

These are just a few examples. In developing these new varieties and processes, we typically work closely with industry and commodities groups and our other research cooperators.

Last year, ladies and gentlemen, we showed this committee material that was described in a commercial brochure. It was a lactose material that was developed by ARS scientists at the ARS Eastern Regional Research Center in Philadelphia. This material allowed the people who had a lactose intolerance to consume milk or dairy products.

The ARS laboratory and the company who will commercialize this product have received the coveted Industrial Achievement Award from the Institute of Food Technology.

I might add that this is the third time this specific laboratory has received this national recognition. A number of our other laboratories have received similar recognition.

TECHNOLOGY TRANSFER

I point it out only to demonstrate the fact that we are transferring the technology effectively as quickly as possible. Research, of course, is valuable only when it is applied to users. One way we alert user groups and industry to our research results is through a new computer service called Tektran, which contains, right now, about 6,000 separate reports on ARS research, and it is getting larger every month.

Tektran was already going to the cooperative extension services of all land-grant universities and many other state and federal cooperators. Last year, we also offered it without charge to industry. About 300 firms have already requested and have been granted access to our computerized information system.

Business Week and other publications have praised Tektran as a good way to get information to the people who can use it. It is this sort of innovative thinking that allows us to speed up our technology transfer.

Another important step to improve technology transfer involves the patent process. Legislative changes in Federal patent policies made in 1980, together with improvements made in our ARS patent programs, are now promoting more positive interactions between ARS and private industries which directly contribute to the increased transfer of agricultural technologies.

FISCAL YEAR 1988 BUDGET

Mr. Chairman, the ARS budget, as you pointed out earlier, for 1988 is $537,114,000, and it proposes increased funding for two program areas of plant and animal science: crop germplasm collection, maintenance and evaluation, and research to decrease fats in beef, pork, lamb and poultry.

Funding is also requested in 1988 to finance pay increases effective in 1987 and for the increased costs associated with the new Federal retirement system. We have also proposed an increase under our Buildings and Facilities account of $1 million for planning and design of an expanded National Seed Storage Laboratory at Fort Collins, CO.

RESPONSE TO CONGRESSIONAL DIRECTIVES

Mr. Chairman, I would like to submit for the record our response to the congressional directives that we received last year, a summary of where we are in fulfilling those directives.

PREPARED STATEMENT

Mr. Chairman, this concludes my remarks, and I will stand ready to respond to questions at the appropriate time. Thank you.

Senator BURDICK. Thank you. Your material will be received without objection.

[The statement and summary report follow:]

STATEMENT OF DR. TERRY B. KINNEY, JR.

Mr. Chairman and members of the Committee, I am pleased to appear before you to present the Agricultural Research Service budget recommendations for 1988 and to report on the progress we have made in research this past year.

As the Committee is aware, the primary aim of our research is to solve problems that confront American agriculture today. Accordingly, we plan our research projects carefully in consultation with representatives of farm and ranch and commodity organizations and with environmentally concerned groups, like the National Association of Conservation Districts. We also work closely with leaders of USDA action agencies, including the Animal and Plant Health Inspection Service, Soil Conservation Service, Food Safety and Inspection Service and others. We meet annually with the action agency administrators to be sure that our research reflects their particular high priority needs. In addition, we consult regularly with industries and industry groups involved in agriculture, holding face-to-face meetings as much as possible. Next May, for example, we plan to meet in Washington with representatives from practically all of the agribusinesses interested in ARS research. We hold many discussions during the year with Members of Congress about agricultural problems in their States and districts. Cooperation with our colleagues at the SAES and dozens of other university departments is a day-to-day way of life for our researchers and research managers.

All of these consultations help ensure that our research meets the practical, high-priority needs of agriculture in the United States.

For example, we conduct research to encourage greater exports of U.S. agricultural commodities to foreign countries. Congress authorized an additional $3 million to strengthen this program in FY 1987. These funds will be used to address commodity problems including quality issues and action agency priorities. We have already developed a system for fumigating grain aboard ship to kill insects in grain. We have also invented improved instrumentation for classifying different types of wheat -- a matter of great importance to our customers overseas.

We are developing new products and processes to utilize surplus farm commodities. Starch from surplus corn, for instance, has been incorporated into black plastic mulch so that it will biodegrade at the end of the growing season. We have found a fungus that can break a sugar called xylose away from xylan, a component of brans milled from grains. Xylose can be converted into alcohol and other chemicals. We have discovered a bacterium that changes glycerol--a soybean byproduct--into a chemical used to make industrial polymers, including acrylic plastics. And we have devised an instant custard product from rice flour and nonfat dry milk. The new product and processes development program will be strengthened by an additional $7 million provided by the Congress in FY 1987.

Other recent discoveries that have attracted the interest of industry and agricultural processors include:

- Improved thermal fabrics that warm you when you are cold and cool you when you are hot.
- Herbicides and other chemicals encapsulated in a compound derived from starch that release their active ingredients slowly and more effectively.
- Explosion puff-dried mushrooms, carrots, apples, celery, and blueberries that retain flavor and texture indefinitely, are easily stored and could become export items.
- New compounds to repel cockroaches.
- Evaluation of new and acceptable chemical baits to help control imported fire ants.
- A new way to produce a clear, natural apricot juice ready for aseptic packaging.
- A new way to preserve cattle hides, without salt, in one hour, compared with 12 hours from the commercial brine method now in use.
- A hot-water bath treatment for papayas to kill fruit fly larvae and eggs in lieu of chemicals.
- New wraps and wrapping machines for vegetables to extend shelf life.
- New insect pheromones to attract insect pests to traps.

- A patented automated system that cleans beef carcasses with a high pressure shower of vinegar and water as they move down the packing house line and markedly reduces microorganism over current procedures.

These few examples illustrate the variety and scope of ARS research of interest to growers and to agribusiness.

In developing these new varieties and processes, we typically work closely with industry and commodity groups. A new variety of iceberg lettuce recently released, for example, will help California growers ward off one of the crop's major diseases, called big vein. Our research was partially funded by a group of California lettuce growers, who are understandably enthusiastic about the results.

Research, of course, is valuable only when it is applied by users. One way we alert user groups and industry to our research results is through a new computer service called Tektran, which contains more than 6,000 separate reports on ARS research, and is getting bigger every month. Tektran was already going to the cooperative extension services of all land-grant universities, and many other State and Federal cooperators, and last year we also offered it without charge to industry. About 300 firms have already requested and been granted access to our computerized information system, and Business Week and other publications have praised Tektran as a good way to get information to the people who can use it.

Another important step to improve technology transfer involves the patent process. Legislative changes in Federal patent policy made in 1980 together with improvements made in ARS patent programs are now promoting more positive interactions between ARS and private industry which directly contribute to the increased transfer of agricultural technologies. The number of technological discoveries considered for patenting by ARS researchers has increased 30 percent in calendar year 1986 over those reported in calendar year 1985.

Mr. Chairman, the ARS budget request for 1988 is $537,114,000. It proposes increased funding for two program areas of plant and animal science: crop germplasm collection, maintenance and evaluation, $7,347,000; and research to decrease fats in beef, pork, lamb and poultry, $2,100,000. These increases will provide for some expansion in ongoing programs of critical importance. It is essential to acquire and preserve valuable germplasm of economically important crop plants and their wild relatives. Additionally, funding is needed for research to reduce the amount of fat while retaining the desired quality of meat from animals and poultry.

Funding is also requested in 1988 to finance pay increases effective in 1987 and for the increased costs associated with the new Federal retirement system.

We have also proposed an increase under our Buildings and Facilities account of $1 million for planning and design of an expanded National Seed Storage Laboratory in Fort Collins, Colorado. The present facility was constructed in 1957, and has nearly reached its capacity. This is the first facility proposed by ARS in several years and we consider it extremely important.

This concludes my prepared remarks. I will be pleased to answer any questions the Committee may have.

EXHIBITS RELATING TO RESEARCH CONDUCTED BY AGRICULTURAL RESEARCH SERVICE

Pickles from New Fermentation Process

ARS scientists at Raleigh, North Carolina, in cooperation with North Carolina State University and the pickle industry, have developed a new fermentation process for pickling cucumbers that uses closed tanks (traditional fermentation tanks are left open to the atmosphere). Less salt brine is used with this new process, fermentation time is reduced, and new and improved pickle products are possible. The pickle sample was made with this new fermentation process.

Walnut Exports

Japan recently lifted a ban on U. S. walnut imports because of a special fumigation treatment developed by ARS scientists at Fresno, California. The new quarantine treatment uses a higher-than-normal dosage of methyl bromide under vacuum pressure to prevent accidental introduction of the codling moth into Japan in shipments of unshelled walnuts. This new treatment will increase exports for the $160 million U.S. industry.

Thermal T-Shirts

Temperature-adaptable textiles with built-in chemical thermostats warm you when you are cold and cool you when you are hot. Developed at the ARS Southern Research Center, New Orleans, Louisiana, the POLYTHERM process overcomes an earlier problem where the fabric treatment would not withstand laundering or exposure to moisture. Experimental fabrics have now been made that not only respond to temperature changes but also have less shrinkage and improved moisture absorbency, soil release, and antistatic behavior. Polyethylene glycols are durably bound to fabrics and absorb and store heat when surrounding temperatures rise and then release heat when temperatures fall. The process uses inexpensive chemicals to treat fabrics and works on most natural and synthetic fabrics, such as wool and cotton and their blends, fiberglass, and acrylics. Eventually, POLYTHERM could be used on building insulation, draperies, packaging materials, and have aerospace and military applications.

BelRus Potato

BelRus is one of the recent introductions from the ARS potato breeding program at Beltsville, Maryland. It is an extremely high-quality baking variety but is also used for making french fries and other processed products. There have been 29 improved varieties introduced by ARS programs and, excluding Russet Burbank, these varieties account for 36 percent of the U.S. acreage. The annual farm value of potatoes in this country is about $2 billion.

Biodegradable Black Plastic Mulch

The key ingredient for the first experimental biodegradable plastic mulch is starch from surplus corn. Starch-plastic films could replace plastic mulches currently in use that are made only from petroleum-based chemicals. Developed at the ARS Northern Research Center, Peoria, Illinois, the new black film protects tomatoes and other high-value crops from weeds and drought, extends the growing season by warming the soil earlier in the spring, and helps farmers produce an earlier crop at a good price. Although the starch-plastic film costs a little more to produce and market than the conventional plastic now being used, its ability to biodegrade offsets the expense of having to dispose of it - about $100 an acre - at the end of the season. A successful pilot run has been completed by a commercial manufacturing firm.

Pecans

An ARS-developed technique to steam pecans before shelling is now being used commercially to increase shelling efficiency. With this new technique developed at Athens, Georgia, 90 percent of the kernels are recovered as unbroken halves and the preconditioning time for the pecans is reduced from 12 hours to 3 minutes.

New Patent Leather Process

ARS scientists at the Eastern Research Center, Philadelphia, Pennsylvania, have developed a novel process for making patent leather. With this process, the patent leather finishes are applied and then "cured" instantaneously with ultraviolet irradiation. In contrast with conventional procedures, the final product is obtained rapidly without the use of heated curing ovens and with no air pollution. The finished product exhibits good gloss, flexibility, and abrasion resistance.

Rice

With the development of improved varieties from cooperative ARS-State-industry breeding programs, the United States is now a major exporter of rice. Emphasis has been on developing varieties adapted to specific growing areas and having improved physical, nutritional, and cooking characteristics. The use of introduced germplasm has resulted in early-maturing, semi-dwarf varieties with greatly increased yields. Over the last 30 years, the average yield/acre has increased 96 percent overall and 176 percent in California. Over 90 percent of U. S. acreage is planted to these new varieties and exports amount to about $600 million/year.

Dried Apricots

Using bottled sulfur gas to dry apricots not only reduces the air pollution problem but gives processors more control and precision in applying the sulfur. ARS scientists at the Western Research Center, Albany, California, developed the technology needed for processors to switch from elemental sulfur to bottled sulfur gas for drying apricots. Thus, food processors like Mariani Packing Company, San Jose, California, were better able to meet the stringent limits imposed by foreign countries on sulfur content of U.S. apricots and at the same time eliminate air pollution caused by fumes from burning sulfur.

Rice Bran Crackers

Rice bran is being used in the development of new foods such as flakes high in vitamins, minerals, protein, and fiber. ARS scientists at Albany, California, developed a process that stabilizes the bran and prevents the oil within it from deteriorating. Consumers are benefiting from this technology with new, rice-bran crackers and other items produced by Pacific Rice Products, Berkeley, California.

Raisins

ARS scientists at Fresno, California, have used introduced grape germplasm to select rootstock varieties tolerant to nematodes and other soil pests. This reduces the need for soil fumigants and reduces pollution of the environment. Early ripening seedless raisin varieties have also been introduced which allow natural drying and harvest before seasonal late summer rains in California. The annual farm value of U.S. raisins is about $340 million, with exports of about $110 million.

Peas and Lentils

Dry peas and lentils are important field crops used in crop rotation with wheat in the Northwestern States. In cooperation with State universities, ARS scientists have used foreign germplasm to improve nutritional quality, yields, and pest resistance of U.S. varieties. These improved varieties have been used to greatly expand production and export of these food crops. Yields per acre have increased significantly over the last 10 years and the annual farm value of peas and lentils has now increased to $96 million. Eighty percent of U. S. production is exported to 50 different countries.

Explosion-Puffed Blueberries

Explosion-puffed drying, a new process originally developed by ARS Research Centers in Albany, California, and Philadelphia, Pennsylvania, has been used to retain the natural flavor and texture of blueberries while allowing them to be easily rehydrated. ARS scientists at Athens, Georgia, introduced the new technology to the Georgia Blueberry Association and conducted evaluation studies to ensure retention of quality. Explosion-puffed blueberries are now being processed commercially by Delite Foods Inc., Alma, Georgia. They have constructed a plant to use this new technology to process 150,000 pounds of berries annually for use in muffin and cake mixes.

STA-WET, a Commercial Product from Surplus Grains

ARS scientists at the Northern Research Center, Peoria, Illinois, have found new uses for starch from surplus grain crops. They have discovered a modified starch product that is now being produced and sold commercially for several medical, personal care, industrial, and agricultural uses. Its use in these applications is based on its unique ability to absorb many times its weight in fluids. Projected use of highly absorbent starch products is for one billion pounds in the market within the next 3 years. The STA-WET product enclosed is for retaining moisture in packaged potting soils and for transplanting plants.

COOPERATIVE STATE RESEARCH SERVICE

STATEMENT OF JOHN PATRICK JORDAN, ADMINISTRATOR

ACCOMPANIED BY CLARE I. HARRIS, ASSOCIATE ADMINISTRATOR

INTRODUCTION OF ASSOCIATES

Dr. BENTLEY. May I proceed? Mr. Chairman, I would like to correct something I overlooked before I started. I would like to have Mr. Robert Long, my Deputy, be recognized, and also Mr. Hoback, one of the associates from my office, and then I think I should call attention to a continuing guest when you have hearings, Bob Sherman, over here at the end. I don't think I have to introduce him, but he is here, and we recognize him as a helper to us in the budget process.

I would like to now turn to a presentation from the Cooperative State Research Service and call on Dr. John Patrick Jordan, the Administrator for CSRS. At the same time I would like to introduce the Associate Administrator, Dr. Clare Harris, who sits at my extreme left and then call on Dr. Jordan to make a presentation for the Cooperative State Research Service.

STATEMENT OF DR. JORDAN

Dr. JORDAN. Mr. Chairman, Mr. Stennis, the system that I represent traces its history from the Hatch Act of 1887, which established the state agricultural experiment station system across the United States.

This is the centennial year, and in that 100 years, we have seen a great deal of progress. We have witnessed the harnessing of science for the resolution of real world problems in agriculture, food and forest sciences and provided the technical basis upon which American agriculture became the envy of the world.

There are characteristics, Mr. Chairman, of that system that are worth commenting on. First of all, the system involved the great agricultural learning centers of America; and second, decisionmaking at the state level. It involved direct state legislative input into the priority-setting process. It mobilized basic research scientists to work on very practical problems. It involved leveraging funds by providing a requirement to match the federal dollars, a requirement which is so far surpassed as to not really be an issue today at all.

This year we celebrate a century of service to American agriculture by a highly successful system of 12,500 scientists, 13,000 graduate students and 7,200 technicians who conduct approximately two-thirds of the publicly supported agricultural research in our nation.

Mr. Chairman, early last week, as Secretary Bentley has pointed out, we had a number of activities in which your colleagues and those in the House of Representatives participated. Included in those activities was a forum for research entitled "Tomorrow's Challenges," and it focused almost entirely on the future. That evening, Monday, March 2, we had at the Smithsonian Institution's National Museum of American History, an announcement by Secretary of the Smithsonian Robert Adams, with participation by our own Deputy Secretary and also Mr. Dale Garson from the House of Representatives, announcing a permanent exhibit in that museum entitled "The Search for Life." What it focuses on, Mr. Chairman, is the impact of science upon agriculture and on health.

In your packet of materials is a list of the exhibits at that presentation which included over 60 products produced by the state agricultural experiment station system, and enjoyed that evening.

Also, at that time, Mr. Chairman, recognition of the joint House-Senate resolution regarding the Hatch Act centennial was acknowledged, and the proclamation by the President of the United States concerning the same issue was read.

We also happen to be, at this particular time, commemorating the 25th anniversary of the McIntire-Stennis Cooperative Forestry Research Program, a program, as you well know, Mr. Chairman, in part named for one of the most distinguished Senators in the history of this great body. Before I leave, sir, I would like to have the privilege of presenting the first summary booklet of the accomplishments of that program to Senator Stennis.

Senator BURDICK. Without question, it will be granted.

COMPETITIVE RESEARCH GRANTS PROGRAM

Dr. JORDAN. Fiscal year 1986 was the second year, Mr. Chairman, for the expanded Competitive Research Grants Program with its new dimensions in biotechnology, animal science and pest science. The quality of the proposals in all of the areas was exceptional, and we were able to fund about one-fourth of the number of proposals submitted and a little more than one-tenth of the number of dollars requested. Nevertheless, it made an enormous impact on the quality and the breadth of program that we were able to accomplish in the last fiscal year.

YEARBOOK OF AGRICULTURE

Mr. Chairman, I hope that you and all members of the subcommittee have had an opportunity to read the 1986 Yearbook of Agriculture entitled "Research for Tomorrow." It contains a large number of short writeups on accomplishments, not only from the agricultural experiment stations, but also from the USDA's Forest Service, Economic Research Service, Agricultural Research Service, Extension Service and the resident instruction programs within the university system. What it really does is give you a bird's eye view of where we are today and where we think we ought to be going as we are getting ready for the 21st century.

REPORT OF SELECTED SIGNIFICANT ACCOMPLISHMENTS

Among the many exciting advances that have been made recently, one of those involves what might be called horses' AIDS. In horses, the disease is called Equine Infectious Anemia [EIA], and it is transmitted primarily through an insect vector. It has, however, almost all the major characteristics associated with human AIDS virus. In fact, it is probably an ideal model system for testing drugs such as AZT that are being examined.

No problem has more of an economic impact and can lead to a more rapid disaster in the horse industry, including the horseracing industry, than EIA. The picture on the left, Mr. Chairman, shows a horse just a matter of hours from death, and he has all the characteristics that you would envision such an animal having. That is startling, but the picture on the right is even more startling, because that beautiful horse is a carrier of EIA, in fact, probably in its most virulent and most effective timeframe for transmission of that disease to other animals. Many states now have rules and regulations about transporting animals across their borders that require blood tests with respect to the EIA virus, a test that was developed at Cornell University and Louisiana State University.

This model, Mr. Chairman, is a model of the EIA vector virus. It is a good model for a number of vector viruses, including AIDS, and it is about 10 million times larger than the actual virus. What it shows is that its surface has the bumpy protein materials embedded in a lipid or fat base which gives it a great deal of flexibility. If we were to cut it through the middle, we would see that in the middle, there is a protein shell that contains ribonucleic acid, which when broken open in a living organism replicates itself and causes the infection to spread. The resultant deoxyribonucleic acid becomes a part of the genome forming new virus particles. What happens is when this gets into the bloodstream it increases the infectivity, spreading that virus throughout the organism.

Currently, research on this important disease is focusing on trying to engineer with biotechnology, a protein that will confer long-term immunity in horses. All we have been able to do so far is provide immunity for just weeks or perhaps a month. Horses' deficient immune systems, like human beings', are open prey to almost any and all other kinds of diseases.

Switching gears, sir, Oklahoma research economists have developed a set of integrated farm financial statements for use in the microcomputer. They do several things: It provides a net worth statement, a cash flow statement, an income statement and a debt worksheet. Armed with these, extension specialists, area farm management agents and financial analysts working with farmers and ranchers who are experiencing financial difficulty have been able to give them a better bird's eye view of where they are and what some of their objectives are for dealing with these tough conditions.

In 1986, the Department of Agriculture increased its emphasis on small-scale agriculture. As Dr. Bentley has already identified, research on farm systems for small-scale producers involves an integration of the production, marketing and utilization aspects of the individual commodities. The Colleges of 1890 and Tuskegee University are particularly well designed and focused to provide some of the leadership in this important area. When put together with the strength of the 1862 system, they can develop a substantial data base to help the small-scale farmer, regardless of whether that person is a part-time farmer or a farmer with a number of small enterprises put together.

Fiscal year 1987 is the fifth and the last year of the 5-year $50 million facilities program focusing specifically on the Colleges of 1890 and Tuskegee University. Dr. Bentley and I have both been to a number of these institutions, and I think you should feel very proud of the accomplishments and the competitive position in which these facilities and equipment purchases have placed the Colleges of 1890.

Alcorn State University, for example, has completed a construction project involving a boiler house, a layer house, processing house and also research laboratories to provide useful information to the poultry industry of the entire southeastern portion of the United States.

BUDGET RECOMMENDATION

To finally turn our focus, Mr. Chairman, to the budget recommendation which you identified correctly, it is $240,270,000 for fiscal year 1988. It reflects both the full appreciation for the need to reduce spending in the federal government and at the same time recognizes the commitment of this nation to the concept behind the Hatch Act of 1887, enacted, Mr. Chairman, into law 100 years and 1 week ago today.

The budget recommendation contains a 5-percent increase in the base-funded programs of Hatch, McIntire-Stennis and Evans-Allen. These programs are the foundation upon which the remaining Federal funds, including special and competitive research grants, plus funds from the state legislatures and private industry, create peaks of excellence in each of our stations. Funding these base programs is a high priority because they provide the basic laboratory facilities and support for scientists, graduate students, and the laboratories necessary for long-term stability of agricultural research.

The competitive research grants program also is considered a high priority with fiscal year 1988 funding recommended at 9.5 percent above the fiscal year 1987 levels. It is hoped that this will allow USDA to participate in a joint plant science research grants program with the National Science Foundation and the Department of Energy, the purpose of which is to increase funding for the basic research in the plant sciences in order to maximize the utility of plants, particularly in the economic sphere of agriculture. There is also a recommendation to increase funding for human nutrition to $3 million per year. The animal science program had a modest beginning at $4.3 to $4.5 million per year for its first 2 years, and it is recommended for a substantial increase to $7 million. There is also continuation of the very high priority biotechnology program involving both animals and plants at a level in excess of $19 million.

As part of the administration's overall spending reduction package, no funding has been recommended for the special research grants program, the Morrill-Nelson permanent appropriation, or other graduate training grants. However, support for these can be provided in both the base-funded programs and in the competitive research grants program. Strengthening grants are recommended for the Colleges of 1890 and Tuskegee at the level of $2 million.

PLANNING

In your packet, Mr. Chairman, are a couple of tan publications. The first one is entitled "Research Initiatives: A Research Agenda for the State Agricultural Experiment Stations." It provides an indepth focus on 21 major initiatives that was gleaned from an original list of 121 major initiatives that was boiled down from recommendations amounting to over 600 submitted by industry and also the scientific leadership in America. Justification for this list, identification of specific and achievable objectives and the relationship to the base program are outlined in the publication. What it provides is a master plan, a strategic plan, if you will, identifying both programmatic needs, funding and talent required to maximize a tremendous 30 to 50 percent annual rate of return for investment in research. This is an investment critical to the future of the competitiveness and success of American agriculture. It is clearly, Mr. Chairman, a multiyear program plan, and it reflects emphasis only on the highest priority needs.

Another document in that packet, entitled "Research Dynamics: The Base Program of Research in the State Agriculture Experiment Stations," explains the base-funded programs which are the foundation for the rest of the program. It shows what is being accomplished now and what role these accomplishments will play in the future.

PREPARED STATEMENT

Mr. Chairman, this concludes my prepared remarks. I will be pleased to answer any questions.

[The statement and biographical sketch follow:]

STATEMENT OF DR. JOHN PATRICK JORDAN

Mr. Chairman and Members of the Subcommittee: As this Subcommittee is well aware, the Cooperative State Research Service is the agency of the USDA through which Federal research funding for the States is channelled and coordination is accomplished on behalf of the Department of Agriculture, in cooperation with all of the State and Territorial Agricultural Experiment Stations; the Colleges of 1890, including Tuskegee University; all of the forestry schools; and all of the Colleges of Veterinary Medicine in the United States.

In addition to land-grant universities, there are other universities, not of the land-grant model, which are participants in the system. However, we trace our history from the Hatch Act of 1887, establishing Agricultural Experiment Stations across the length and breadth of this nation. During that hundred years of history, we have witnessed the harnessing of science for the resolution of real-world problems in agriculture, food and forest sciences, and provided the technical basis upon which American agriculture became the envy of the world. Several characteristics of the system have been paramount in achieving that success.

First of all, the system involved the great agricultural learning centers in America and decision-making at the State level. It involved direct State legislative input in the priority setting process. It mobilized basic research scientists to work on very practical problems, bringing forth real-world solutions. It involved leveraging funds by providing a requirement to match the federal dollars, a requirement which is so far surpassed as to make it a non-issue.

This year we celebrate a century of service to American agriculture by a highly successful system of 12,500 scientists, 13,000 graduate students and 7,200 technicians who conduct approximately two thirds of the publicly supported agricultural research. This system evolved from the Congressional Act of 1887, authored by William H. Hatch of Missouri and provides an outstanding example of State-Federal partnership.

In the Explanatory Notes, the Department has provided you with reports on the results of both the Competitive Research Grants and the Special Research Grants, in addition to a quarterly report on accomplishments under the Competitive Research Grants program. Fiscal year 1986 was the second year for the expanded Competitive Grants program with its new dimensions in biotechnology, animal science, and pest science. The quality of all categories in 1986 was extremely high. We received many more proposals than we were able to fund. There were a total of 1,570 proposals requesting $328 million and we could only fund 415 grants for $40 million. CSRS also administers a Forestry Competitive Grants program. In fiscal year 1986, there were a total of 429 proposals requesting $81 million and we funded 63 grants for $6 million.

Mr. Chairman, I hope you and all members of the Subcommittee have had an opportunity to read the 1986 Yearbook of Agriculture, "Research for Tomorrow". This book contains a large number of success stories from all sectors of the publicly supported agricultural research system. The successes have been based upon public investment in the base programs of Hatch, McIntire-Stennis, and Evans-Allen as well as the Special and Competitive Grants Programs. It includes outstanding research carried out both separately and jointly among the university system, and the USDA's Agricultural Research Service, Forest Service, and Economic Research Service. It also has interesting articles about the relationship of these research agencies with higher education and with extension.

REPORT OF SELECTED SIGNIFICANT ACCOMPLISHMENTS

Among the many exciting advances that have been made recently, one of the most exciting involves what might be called "Horses' A.I.D.S." In horses, the disease is called Equine Infectious Anemia (EIA) and is transmitted primarily through an insect vector. It has, however, almost all of the major characteristics associated with human A.I.D.S. virus. The status of the research story is comparable to that of human A.I.D.S., partly because EIA has been studied for a number of years on a less intensive basis. Human medicine is interested in EIA because of its excellent model characteristics related to A.I.D.S. No problem has more of an economic impact and can lead to a more rapid disaster in the horse industry, including the horse racing industry, than EIA. Many States now have restrictive legislation regarding the interstate transport of horses and require that horses have blood tests before crossing State borders. The tests to determine E.I.A. were developed at Cornell and Louisiana State Universities.

It can be run in a relatively short period of time using a small sample of blood. Short-term immunity has been successfully conferred using biotechnology. Current research focuses on the development of an engineered protein that will confer long-term immunity to horses. Horses with deficient immune systems are open prey for almost any and all other horse diseases.

In another field, Oklahoma research economists have developed a set of integrated farm financial statements for use on the microcomputer. The software package known as Integrated Farm Financial Statements (IFFS) consists of a net worth statement, cash flow statement, income statement, and debt worksheet. IFFS has been adopted by extension specialists, area farm management agents, and financial analysts working directly with farmers and ranchers who are experiencing financial difficulty. Many farmers have used the results of financial analyses to work out a suitable arrangement with their lender for continuing their farming operation on a more stable basis.

In 1986, the Department of Agriculture increased its emphasis on small-scale agriculture. Research on farm systems for small-scale producers is integrated into a comprehensive plan for a particular farm enterprise system which couples production, utilization, and marketing of the farm commodity. In order to increase agricultural incomes from small farm units, a comprehensive research plan that considers all aspects of cost and management efficiencies must be addressed.

Small-scale farming research is an area in which the Colleges of 1890 and Tuskegee University are particularly suited and working in concert with the Colleges of 1862, they can develop a substantial data base to help the small-scale farmer, regardless of whether he is a part-time farmer or a farmer with a number of relatively small enterprises. For example, a scientist at Southern University used linear programming to demonstrate the earnings potential of small farm families through optimum allocation of their resources. Results generated by the model reveal that small-scale agriculture in south central Louisiana has the potential to earn a net farm income of at least $30,000 by adopting the enterprise combination identified in the study. Part of the optimal solution were enterprises such as vegetable crops that can and are grown in the area. Small-scale agriculture can be a viable economic unit as long as the available resources are used efficiently and adequate market outlets exist and are accessible.

Fiscal year 1987 is the fifth and last year of a five-year $50 million facilities program focusing specifically on the Colleges of 1890 and Tuskegee University. For example, Alcorn State University has completed the construction of a poultry research complex. This research center consists of a layer house, broiler house, processing house, and research laboratories. Poultry is an important industry in Mississippi as you well know, Mr. Chairman. The newly constructed facilities at Alcorn State University should enable it to provide even more useful information to producers in the Southeastern States.

Similarly, South Carolina State University has completed construction on a research facility that houses its entire research faculty. Each of the institutions is completing a well-designed, well-reviewed and well-executed facilities improvement program which is making a great difference in the type of student that is attracted to the institution and the quality of work accomplished in research.

BUDGET RECOMMENDATION

The budget recommendation for FY 1988 for CSRS is $240,270,000. It reflects both full appreciation for the need to reduce spending in the Federal government and at the same time recognizes the commitment of this nation to the concept behind the Hatch Act of 1887, enacted into law 100 years and seven days ago today. The budget continues to reflect strong support for the State-Federal partnership in food and agricultural research which was established by that Act.

The budget recommendation contains a five percent increase in the base funded programs of Hatch, McIntire-Stennis, and Evans-Allen. These programs are the foundation upon which the remaining Federal funds including special and competitive grants plus funds from the State legislatures and private industry create peaks of excellence. Funding of these base programs has a high priority because they provide basic laboratory facilities, scientists, graduate students and support necessary for the long-term stability of agricultural research. These programs allow maximum flexibility at the station level to support research of the highest priority and at the same time assure the strong working relationship between the USDA and the State Agricultural Experiment Station system.

The Competitive Research Grants Program also is considered high priority with FY 1988 funding recommended at 9.5 percent above FY 1987 levels. It is hoped that this will allow the USDA to participate in a joint plant science research grants program with the National Science Foundation and Department of Energy. The purpose of that effort is to increase funding for basic research in the plant sciences in order to maximize the utility of plants, particularly in the economic sphere of agriculture. The increase will also bring funding for human nutrition to $3 million per year, a level we consider to be minimum for a viable program. The animal science program had a modest beginning in its first two years. The annual funding range was $4.3 - $4.5 million with this year's recommendation for an increase to $7 million. There is also a continuation of the high priority biotechnology program in animals and plants at a level in excess of $19 million. This high priority program area has encouraged traditional as well as new cooperators to conduct fundamental research applicable to the needs of farmers and ranchers in America.

As part of the Administration's overall spending reduction package, no funding has been recommended for the Special Research Grants Program, the Morrill-Nelson Permanent Appropriation, or Graduate Training Grants. Support for these programs can be provided in both the base funded programs and the Competitive Research Grants Program. Strengthening Grants are recommended for the Colleges of 1890 and Tuskegee at the level of $2 million.

PLANNING

Mr. Chairman, you were part of a meeting held in June 1985, which launched the experiment station system, in concert with CSRS, towards a strategic planning effort. The symposium of which you were a part concentrated on key problem areas needing to be addressed in great detail by the system. Last year, I shared with members of the committee the proceedings of that conference. The subsequent two steps gave birth to a document which I have placed in your packet of materials. The publication, "Research Initiatives: A Research Agenda for the State Agricultural Experiment Stations," provides an in-depth focus on 21 major program areas that were gleaned from an original list of 121. Justification for this list, identification of specific and achievable objectives, and the relationship to the base program are outlined in the publication. Specific costs associated with each priority and the kind of commodity group support behind each initiative have also been identified. This process provides a clear understanding of the programmatic, funding and talent needs required to maximize the tremendous 30-50 percent annual rate of investment return in research which is so critical to the future competitiveness and success of American agriculture. It is clearly a multi-year program plan and reflects emphasis only on the very highest priority needs.

A second document in your packet entitled, "Research Dynamics: The Base Program of Research in the State Agricultural Experiment Stations," explains the base funded programs which are the foundation upon which all the other types of funding can be added to the benefits of American agriculture.

This being the Centennial year of the State Agricultural Experiment Station System, I can think of no more appropriate time to focus attention on the benefits of the base funded program and its relationship to the other research programs.

I am privileged to have with me today, Mr. Chairman, Dr. Neville P. Clarke, Director of the Texas Agricultural Experiment Station and Deputy Chancellor for Agriculture for the Texas A&M University System. Dr. Clarke served as chairman of the planning committee that developed these documents.

Biographical Sketch

Joseph E. Varner
Chief Scientist, Competitive Research Grants Program

Dr. Joseph E. Varner was appointed Chief Scientist of the Cooperative State Research Service's Competitive Research Grants Office in 1986. He provides administrative guidance and scientific expertise to the Competitive Research Grants Program. Born in Ohio, he earned Bachelor of Science and Master of Science degrees in Chemistry and a Ph.D. in Biochemistry from the Ohio State University. During his 23 years at Ohio State, he progressed through the ranks from student to Professor. Dr. Varner was a National Science Foundation Senior Postdoctoral Fellow at the University of Cambridge and at the University of Washington. In 1977, he received a Docteurs Honoris Causa, L'Universite De Nancy.

In 1961, he was appointed a Senior Staff Scientist at the Research Institute for Advance Studies of Martin-Marietta. In 1965, he became Professor of Biochemistry at the Plant Research Laboratory, Michigan State University. Since 1973, Dr. Varner has served as Professor of Biology at Washington University in St. Louis. In 1980, he was an American Cancer Society Scholar.

Dr. Varner is a fellow of the American Association for the Advancement of Science, a member of the National Academy of Sciences and the American Academy of Arts and Sciences. He has served as President of the American Society of Plant Physiologists. Currently, he is the President of the Society of Developmental Biology and a member of the Board on Basic Biology and the Commission on Life Sciences at the National Research Council. Dr. Varner has served as visiting professor at the National University of Mexico, University of Chile, University of California, and North Carolina State University.

Dr. Varner's collaborative research with students and scientists has covered a wide range of plant biochemistry and physiology with the emphasis most recently on the use of the tools of biotechnology to probe the structure and function of plant cell walls. Dr. Varner is author/editor of Plant Biochemistry, an advanced textbook. For 17 years he has been Associate Editor of Plant Physiology.

IMPACT OF AGRICULTURAL RESEARCH

Senator Burdick. Secretary Bentley?

Dr. Bentley. Mr. Chairman, we would be pleased to answer questions. I might just summarize by saying that we are looking at the importance of science and education, technology and innovation and the competitive position of not only agriculture and all of the things that go with these budgets. I know my colleagues are very enthusiastic about supporting these activities. They will be glad to respond to questions and provide background information that will help us understand these. Thank you.

Senator Burdick. Senator Stennis?

Senator Stennis. Mr. Chairman, I want to thank the gentlemen here for what they have done and for what their workers have done in these various research departments. It means so much, so much to agriculture and forestry and everything else.

I had the good fortune of going to an agricultural college. I didn't learn too much about agriculture maybe from the books, but I have learned from the better students there and their teachers about the far reach that agriculture research has.

I have lived out in the country, so to speak, all these years and have seen it day to day. When I was a lawyer practicing law, practicing is right, I observed the continued good work from year to year contributed by the Department of Agriculture and its various endeavors that meant so much to the cultivated crops as well as the natural field growth.

You referred there to ~~the~~ late Congressman McIntire, who came here before I did. He had already done a great deal of work in the field of research, and I had the privilege of joining him and just helping him supply the money, and it gave me a contact all these years, a channel of production that meant so much.

This is a must on our list that we must give these subject matters attention, and we must supply them with a reasonable amount of money. Otherwise, the penalty for not doing so will reap tremendous pressure. I think the people would rise up.

PINE BARK BEETLE

We are plagued, if I may just mention one thing, we are plagued now, in our country, out there in Mississippi, with a beetle, a pine beetle. It came in from somewhere. We don't seem to know fully where he came from, but he is certainly tearing things up. I have a little timber myself, not any great amount, but I have gotten my hands on some over the years. We were sailing along without a blemish until we met up with this new beetle down home.

The Forest Service has worked on it and done what they can, but we don't have a real answer. If you gentlemen have that anywhere in your category of things you look at to try to take care of, let me highly recommend from me to you that you give that some attention. I am not referring to anyone else as lacking in doing their duty, but the end result is that with those trees, those beetles come in there, and they operate on a circular basis, a pattern. If you have seen it, I don't know.

I am very glad to be here, to be just a very small part of the work of this subcommittee ably taken care of by the chairman, and I am going to stay with you. I appreciate what you are doing. Thank you.

Thank you, Mr. Chairman.

Senator Burdick. Senator Harkin.

Senator Harkin. Mr. Chairman, I thank you. I yield to Senator Sasser, my colleague from Tennessee, for questions.

Senator Sasser. I thank my friend, the Senator from Iowa. Mr. Chairman, I ask unanimous consent that some questions that I have directed to the panel be put in the record and ask that they respond as early as possible.

Senator Burdick. It will be made a part of the record.

Senator Sasser. I thank the chairman, and I thank the Senator from Iowa.

Senator Harkin. Thank you. Mr. Chairman, I just propound one question, and I would like to submit my other questions for the record.

FOOD AND INDUSTRIAL AGRICULTURAL PRODUCT CENTER

But I would just like to ask—last year, the committee asked the Department to develop a plan for the creation of a National Center for Food and Industrial Agricultural Product Development, a $50,000 study. I would like to know what the status of it is.

I think, if I am not mistaken, the report was supposed to be back to the Congress by May 1. That was supposed to be the deadline. Do you think you will be able to meet that deadline?

Dr. JORDAN. Yes, Senator; I am reviewing the first draft of that report now, sir.

Senator HARKIN. Good.

Dr. JORDAN. I don't think there will be any difficulty submitting in adequate time, perhaps beating the May 1 deadline.

Senator HARKIN. I appreciate that very much.

Since that was such a short question, I can ask another one. [Laughter.]

INTERNATIONAL AGRICULTURAL TRADE CENTER

What are the Department's plans for the implementation of the International Agricultural Trade Center authorized in the 1985 farm bill, and are there any plans for rapid development of such centers in those areas hardest hit by internationally created problems? Do I need to expand on that at all?

Dr. JORDAN. No, sir; I believe I understand just fine, thank you. We have one such center that is being flown as kind of a trial balloon this year in Oklahoma. That one is putting its program plan and its facilities plan together at this moment. We are also examining the issue in depth of how many of these we would need. We will be focusing on a regional basis. We are also trying to examine the issue of what, each of these will cost. Will they all cost the same? That will be the focus on the various centers, and will be part of the report to you, sir.

Senator HARKIN. I appreciate that. By when will you be reporting back? I am just thinking about time, some kind of timeframe in this budget cycle.

Dr. BENTLEY. Yes; that is our intention.

Senator HARKIN. OK.

Dr. BENTLEY. There are some questions that have come up that are being raised in the Department, such as how these centers will interact with ongoing responsibilities of the Foreign Agricultural Service. We are now talking about that issue right now. I spent most of the morning talking about the first draft of that report. That is why I make this point, and it is our intention to move as quickly as possible.

Senator HARKIN. Thank you.

Mr. Chairman, I may have two other questions. I may submit those for the record, Mr. Chairman.

Thank you very much, gentlemen.

Senator BURDICK. That will be fine.

AIDS VIRUS IN ANIMALS

Dr. Jordan, in listening to your testimony I was intrigued by its contents. You talked about horses' AIDS. Has that gotten into other animals, cattle, sheep, hogs or anything like that? Do you find any evidence of that in the other animals?

Dr. JORDAN. There are a number of vector virus infections that have certain characteristics analogous to it, but not quite as close as this one. The thing that is alarming about this, in horses, is that it is carried by an insect vector. The real question that has been asked in the human arena is, "Is that a possibility, too, for infectivity?" That would open a whole new route of spreading that disease; wouldn't it?

Dr. KINNEY. Could I, Mr. Chairman, make a brief comment?

Senator BURDICK. Yes.

Dr. KINNEY. We have been, I guess for want of a better word, I guess plagued for some months now by people who have the idea that the vector virus disease, African swine fever, is, in fact, synonymous with or analogous to AIDS.

There is absolutely no evidence of that, nor is there any evidence that any animal disease is remotely related to AIDS except that they are a vector virus, which means that they belong to a family of viruses, and there may be thousands of such viruses.

I needed to clarify the record so we don't go around answering thousands of letters again.

HATCH ACT FORMULA FUNDING

Senator BURDICK. Thank you very much.

One hundred years ago, the Hatch Act provided the framework for the establishment of a nationwide network of state agricultural experiment stations.

These experiment stations promote agriculture production, marketing, distribution and utilization of crops and livestock, as well as conservation of nutrition projects through a number of federally supported research projects.

The President's recommendation for fiscal year 1988 would increase funding for the Hatch Act research by $6.7 million above the fiscal year 1987 appropriations of $148 million.

Dr. Jordan, would you please outline briefly for the committee how the Cooperative State Research Service, the CSRS, intends to spend the $5 million in the formula funds for research programs requested in the fiscal year 1988 budget?

Dr. JORDAN. Yes, sir; these funds are distributed on the basis of a formula, to the individual states. Through a mechanism of a peer review system at each station, the states select the projects to be funded and the level of funding to be placed on them. These new dollars will go to expand programs in each of the individual states consistent with the overall master plan that is provided in the booklet entitled "Research Initiatives."

Senator **Burdick**. On which research topics and in what parts of the country? Now, if you don't have that at your fingertips, you can supply it. But can you give us a general idea?

Dr. **Jordan**. Increases will be provided to all states and every station will have some increase. There is also a focus across the country on the general topic of restoring agricultural profitability.

Funding priorities will be a little different in the state of Washington, sir, than they may be in Mississippi or Florida or North Dakota.

REGIONAL RESEARCH

Senator **Burdick**. From your statement, regional research projects would be increased by $1.8 million, under the President's budget request. Please tell us how CSRS would spend this money and what states would receive the additional funds if you have any.

Dr. **Jordan**. The regional research money is distributed across the system for regional research projects that involve generally half a dozen or more states but are required to have at least two or more states involved.

Also, they frequently involve the ARS research program, and in a coordinated way, they move forward on a given issue. The number of regional research projects has dropped in recent years due to constraints of funding. They will focus on areas of restoring agricultural profitability. Some of which, I think, will be in the economics, marketing, and biological areas.

Senator **Burdick**. Could you supply a list of the states that receive these funds for us for the record?

Dr. **Jordan**. Yes, sir; I would be glad to.

[The information follows:]

Hatch Act Regional Research

[Estimated state distribution of fiscal year 1988 increase]

State	*Fiscal year 1988*
Alabama	$36,210
Alaska	6,145
American Samoa	
Arizona	32,493
Arkansas	31,734
California	67,173
Colorado	46,577
Connecticut	21,199
Delaware	15,857
District of Columbia	4,578
Florida	29,410
Georgia	49,541
Guam	5,262
Hawaii	16,477
Idaho	26,217
Illinois	43,421
Indiana	36,596
Iowa	64,064
Kansas	36,424

Kentucky	36,261
Louisiana	29,955
Maine	22,094
Maryland	27,800
Massachusetts	27,137
Michigan	38,533
Micronesia	
Minnesota	40,798
Mississippi	36,617
Missouri	34,306
Montana	28,690
Nebraska	38,930
Nevada	15,709
New Hampshire	15,891
New Jersey	49,397
New Mexico	17,283
New York	66,463
North Carolina	51,925
North Dakota	25,850
Northern Mariana Islands	
Ohio	41,616
Oklahoma	26,039
Oregon	40,635
Pennsylvania	54,625
Puerto Rico	32,243
Rhode Island	16,455
South Carolina	29,904
South Dakota	26,070
Tennessee	37,074
Texas	52,738
Utah	29,612
Vermont	14,533
Virgin Islands	5,187
Virginia	35,485
Washington	62,428
West Virginia	23,156
Wisconsin	43,611
Wyoming	23,282
IR-5	10,716
Contingency	1,049
Subtotal	1,779,475
Small Business	22,525
Total	1,802,000

This is an estimated distribution of the proposed $1.8 million increase requested for the Hatch Act Regional Research Program in the CSRS budget. Final distribution will be determined by the Committee of Nine.

HIGHER EDUCATION

Senator BURDICK. From 1978 to 1985, there has been a 28-percent decrease in the number of undergraduate majors in agriculture and natural resources at U.S. colleges. The Joint Council on Food and Agricultural Sciences acknowledges that if the United States is to remain a world leader in high technology agriculture, we must assure that we have in place an agricultural science and education system to train and attract specialists to a number of fields.

In reviewing the proposed budget for fiscal year 1988, it is astonishing to see a $5.5 million reduction in funds for higher education in light of a projected shortfall of food and agricultural scientists and engineers through 1990.

Has USDA made any projections of the number of agricultural scientists and professionals that will be required in future years?

Dr. JORDAN. We are working on projections at this time, Mr. Chairman, and I would like to provide the results of that examination for the record. We are knowledgeable that the number of people leaving the profession of science and agriculture as compared to those that are entering it is a differential of 15 to 16 percent per year at the moment. That is not necessarily all bad unless your needs are increasing, and that is what we are trying to fit this data to, Mr. Chairman.

[The information follows:]

EMPLOYMENT OPPORTUNITIES FOR COLLEGE GRADUATES IN THE FOOD AND AGRICULTURAL SCIENCES

Agriculture, Natural Resources, and Veterinary Medicine

Almost 49,000 college graduates in the food and agricultural sciences and closely allied fields are needed each year to fill the Nation's demand for scientific, professional, and managerial positions. These positions are dispersed as follows--

- 32 percent are for Marketing, Merchandising, and Sales Representatives, e.g.
  - Commodity Broker
  - Insurance Agent
  - Sales Representative
  - Grain Merchandiser
  - Market Analyst
  - Technical Service Representative
- 29 percent are for Scientists, Engineers, and Related Specialists, e.g.
  - Biochemist
  - Geneticist
  - Toxicologist
  - Food Scientist
  - Nutritionist
  - Water Engineer
- 14 percent are for Managers and Financial Specialists, e.g.
  - Business Manager
  - Economist
  - Food Service Manager
  - Credit Analyst
  - Financial Analyst
  - Retail Manager
- 11 percent are for Social Services Professionals, e.g.
  - Community Development Specialist
  - Naturalist
  - Reginal Planner
  - Dietitian
  - Park and Recreation Specialist
  - Regulatory Agent
- 8 percent are for Agricultural Production Specialists, e.g.
  - Farmer/Rancher
  - Game Rancher
  - Professional Farm Manager
  - Forest Manager
  - Nursery Products Grower
  - Turf Producer
- 6 percent are for Education, Communication, and Information Specialists, e.g.
  - Advertising Specialist
  - Computer Systems Analyst
  - Public Relations Specialist
  - College Faculty Member
  - Editor
  - Information Systems Analyst

The overall average annual demand for college graduates with expertise in the food and agricultural sciences exceeds the available supply by about 10 percent. For many occupational areas, however, the shortfalls are far more severe. For example:

- Annual demand for Social Services Professionals exceeds the supply by 20 percent.

- Annual demand for Scientists, Engineers, and Related Specialists, for Marketing, Merchandising, and Sales Representatives, and for Managers, and Financial Advisors exceeds the supply by 16 percent.

- Data on the age distribution of faculty members in colleges of agriculture suggest that about 27 percent of the current faculty members will reach the age of 65 by 1994 and thus be eligible for retirement. One estimate is that an equivalent of 90 percent of those faculty eligible for retirement will do so during the decade. Assuming a 2 percent annual attrition for other reasons, more than 40 percent of all Ph.D. graduates will be required for academic and Experiment Station replacements alone.

- The largest single employer of agricultural scientists in the country is the U.S. Department of Agriculture. This important corps of scientists is even more of an aging society than faculty members at colleges of agriculture and Agricultural Experiment Stations. If only half of our USDA food and agricultural scientists reaching eligibility for full retirement provisions during the coming decade elect to retire and are replaced with agricultural scientists, another 17 percent of the annual Ph.D. output will be required leaving 430 or so a year for Extension Service, industrial organizations and agri-business, regulatory agencies, other Federal research laboratories, and consultancies.

REDUCTION IN FUNDS INDICATED

Senator BURDICK. That indicates to me that there will be a reduction in funds. Does that mean that the personnel follow that reduction?

Dr. JORDAN. All sources of funding—state, Hatch, McIntire-Stennis and Evans-Allen funds, all together, Mr. Chairman, support approximately 13,000 graduate students. The fellowship program, which has been enormously successful, funds an additional 300 students. We have completed funding obligations to that first group of students in the fellowship program and by this spring will open the second phase of the program. This will involve approximately 50 to 60 doctoral students that will be forward funded for their entire career in the graduate study arena. The students entering the USDA National Needs Graduate Fellowships Program are very high quality students. In fact, they are substantially higher than those who enter medicine or engineering or any other field. It has been enormously successful, from our point of view. The great value of depending heavily on the formula programs and the competitive research grants program, which funds a large number of graduate students, is that these are focused on the flexibilities that are available to station directors or principal investigators through the peer review process. There are some values to the National Needs Graduate Fellowships Program, Mr. Chairman. There just isn't money to cover all programs. The formula and competitive research grants program are the most flexible ways that we believe we could move.

AGRICULTURAL SCIENTISTS

Senator BURDICK. Can we act now to assure that training is available to all graduate and doctoral students who are interested in agricultural sciences?

Dr. BENTLEY. If we speak, Mr. Chairman, in terms of students, can they enter colleges of agriculture, yes. There are openings in colleges of agriculture and as you pointed out correctly, there has been some reduction in the number of students choosing the agricultural curriculum or entering colleges of agriculture. There are openings for undergraduates. The question that we need to be concerned about is: Are we attracting the students who have the kind of interest in science and basic sciences that will be required in the years ahead? We are hoping to deal with that by providing the funding through research grants to the states. Dr. Jordan has already referred to the number of graduate assistants that are now supported under the Hatch program and the competitive research grants program.

The National Needs Graduate Fellowships Program for encouraging graduate education is an important and successful program. But unfortunately, we were unable to get funding for this graduate training program, as was already mentioned. That does not lessen the commitment of the research programs and the extension programs for support of graduate education.

I might point out that Dr. Kinney and the Agricultural Research Service have made arrangements for postdoctoral fellows to come and study and work in the various federal laboratories. I believe, Dr. Kinney, the number is about 200 postdoctorates, people who are either postdoctoral or are completing their Ph.D. programs who are working with the Agricultural Research Service.

All these steps are being taken to increase the pool of highly trained people, but I must say, we are also interested, as in the case of ARS, to get the talent and the ability of these very fine young men and women.

RESEARCH ON ETHANOL

Senator BURDICK. Within the past several years, efforts have been ongoing to use agricultural commodities to produce ethanol and other nonfood uses.

With regard to ethanol, there have been allegations, made wrongly, that accuse ethanol of being somewhat undesirable for use in engines. Have you done any research in this area? If so, what does it show?

Dr. KINNEY. Mr. Chairman, we have done research for many, many years on the production of ethanol, and there has been research demonstrating a mixture of the alcohol and gasoline.

I think I will defer to my associate, Dr. Carter, or my assistant, Dr. Tallent for more detailed information. But as far as I know, the use of ethanol now is principally an economic consideration rather than the research on the material, per se.

Senator BURDICK. Economic? Because they don't pay the same tax or for some other reason?

Dr. KINNEY. I would say economic because it is competing with gasoline, which is produced cheaper than the ethanol.

Senator BURDICK. Did you understand that I meant that many states exempt the tax? The federal government exempts the tax on the ethanol.

Dr. KINNEY. I agree, Senator Burdick. It could be resolved by legislation, but as it stands right now, it isn't.

Senator BURDICK. I see.

Dr. KINNEY. Dr. Tallent would want to comment further. He is my assistant.

Senator BURDICK. That is fine.

Dr. TALLENT. I don't know how much I can add to what Dr. Kinney has said. The Agricultural Research Service at the Northern Regional Research Center at Peoria and other locations has done extensive research on alcohol fuels.

I am not aware of any damage to engines when you use gasohol, which is 10 percent ethanol with gasoline.

Now, there are problems when you try to use pure alcohol or higher amounts of alcohol. But if you use the gasohol as prescribed, I am not aware of any mechanical difficulties.

Senator BURDICK. In other words, the 10-to-1 ratio seems to work out all right?

Dr. TALLENT. That is correct, sir.

Senator BURDICK. Thank you.

SUNFLOWER AND SUGAR BEET RESEARCH LABORATORY

What is your budget for fiscal year 1988 for ARS for the sugar beets and sunflower facility? What type of research do you expect to carry out at this facility?

Dr. KINNEY. Senator Burdick, are you referring to the new facility at North Dakota State University?

Senator BURDICK. Yes; that is correct.

Dr. KINNEY. Senator, I would like to submit that information for the record. That program will be coming on line, and we are working with the North Dakota State University people to develop that program.

[CLERK'S NOTE: See submitted question.]

Senator BURDICK. I understand that the North Dakota State University has requested $500,000 for necessary utilities and the operation and maintenance functions.

Have you taken any position on that, or will you?

Dr. KINNEY. I think, if I understand correctly, you are referring to the funds for the operation of the facility?

Senator BURDICK. That is right.

Dr. KINNEY. We don't have a request in the fiscal year 1988 budget for those funds. That facility will be coming on board in the second quarter of 1988.

Senator BURDICK. Has anything been budgeted for fiscal year 1988?

Dr. KINNEY. For North Dakota State University, we have funds for ongoing programs now at Fargo which will be located in that new facility. So yes, there are funds.

Senator BURDICK. But I understand that they need funds, also, for the running of those programs.

Dr. KINNEY. Yes; let me clarify. We have funds for the program that will be located in the facility, but there is going to be something on the order of $500,000 additional for operational funds. We have not requested those in our 1988 budget.

We will either have to transfer those funds from other projects or request them in a subsequent budget.

Senator BURDICK. If this is going to start in 1988, we should have it now, shouldn't we?

Dr. KINNEY. Yes; the funds will be needed in fiscal year 1988.

BIOCONTROL OF GRASSHOPPERS

Senator BURDICK. In the appropriations report for this year, the Senate stipulated that $60,000 be designated for the continuation for research on the biological control of grasshoppers at the North Dakota State University. How much money are you sending out to NDSU for this project?

Dr. KINNEY. Senator, we have approximately $200,000 in total for grasshopper research. There are funds going to North Dakota, but I am not sure what they are right now.

If Dr. Knipling were here, perhaps he could answer that.

Dr. KNIPLING. Yes, sir, Mr. Chairman. Agricultural Research Service is allocating $60,000 at the appropriation level to continue the project in North Dakota with the expanded grasshopper program underway in North Dakota. In Idaho, we would expect to focus that project such that it would contribute to the IPM project, as well.

Senator BURDICK. That means $60,000 goes to North Dakota?

Dr. KNIPLING. Yes; it does.

Senator BURDICK. That is good news. Does anybody else want to make a contribution? [Laughter.]

Senator BURDICK. Senator, did you have another question? You can break in here if you wish.

AQUACULTURE RESEARCH

Senator STENNIS. Just one or two brief things. Dr. Bentley, you know the importance of aquaculture, especially catfish farming. Are you familiar with catfish farming?

Dr. BENTLEY. Yes, sir.

Senator STENNIS. We are in the same business. We have that in my state, and it is of growing importance by the day to us and, I think, to the nation. Now, how does your budget treat that matter? How do you prepare for the research needs there?

I found out this is very important. I didn't take it seriously at first, frankly, but it got behind me so hard, I went over there and looked at it. I found out they had something.

Do you have those figures with you? If you don't, you can supply them for the record.

Dr. BENTLEY. Yes, sir; I can make a general comment, and we have some specific figures. One thing that we have to be sure of when we are talking about aquaculture is to recognize the contribution made by two or three states, and one of them being Mississippi, to the development of the aquaculture a long time ago. I am one of those who was around when we began to first talk about that topic and had questions about how or if it could become a practical industry, and it certainly has, and we are delighted with this. The program will be continued in each of those states, and some of the funds will be drawn from the Hatch funds as it has in the past.

The Congress did make arrangements last year and established some aquaculture centers by bringing states together to work on problems in aquaculture, and that is now being implemented. There have been meetings and discussions on how the funding could be used. We are seeing an expansion of interest in aquaculture across the country. That will bring more activities as the years go ahead, if everything goes as it is now.

I would like to turn to Dr. Jordan.

Do you have some specific figures here we could give? Perhaps there are several items in it, and we would be glad to supply it for the record. We do have documentation here.

Do you want to comment on this, Dr. Jordan, either you or Dr. Carter?

Dr. JORDAN. Yes, sir; we have material that we would like to submit for the record that identifies what all the science and education agencies in the Department of Agriculture are doing, including CSRS. It identifies what the formula program is doing in aquaculture as well as ARS, ES, and the National Agricultural Library.

If you would like, Mr. Stennis, we would be pleased to provide it for the record.

[The information follows:]

SCIENCE AND EDUCATION AQUACULTURE PROGRAM

[In thousands of dollars]

	Fiscal year		
	1986	1987	1988
Agricultural Research Service	1,748	2,193	2,240
Cooperative State Research Service:			
Hatch Act	1,574	1,574	1,645
McIntire-Stennis	32	32	32
Evans-Allen	1,394	1,394	1,457
Animal Health and Disease	112	112	
Special Research Grants	903	1,113	
Competitive Research Grants	62	62	62
Federal Administration—Gulf Coast Shrimp	1,236	1,736	
Aquaculture Centers		3,000	
Total, CSRS	5,313	9,023	3,196
Extension Service	1,355	1,355	1,355
National Agricultural Library	100	154	170
Total	8,516	12,725	6,961

PROGRAM IN STONEVILLE, MS

Senator STENNIS. I thank you. Thank you very much, gentlemen.

I am encouraged greatly to know how you have recognized this matter, and I know you have put your hands on the plow. You are not going to turn back. Keep going, keep going. Thank you, Mr. Chairman.

Dr. KINNEY. Mr. Chairman, I would like to state for the record that ARS has a substantial program on aquaculture at several locations, including Stoneville, MS, where we are developing an ongoing program there that will be brand new, and there will be catfish breeding. So we have in excess of $2 million in aquaculture now.

Senator STENNIS. Thank you very much, sir.

AGRICULTURAL PRODUCTIVITY

Senator BURDICK. Section 1467 of the 1985 Food Security Act requires the Secretary of Agriculture to submit reports to the Committees on Agriculture of the House and Senate describing the design and results of research projects involving agricultural productivity research.

Has the Secretary submitted such reports?

Mr. SHERMAN. Mr. Chairman, a separate report has not been prepared. However, data regarding the status of productivity research projects at the federal and state agricultural research institutions are regularly entered into a Current Research Information System which can be accessed to selectively produce listings of research projects by category as well as brief descriptions of the work being done on each project. Further, the annual reports of the Agricultural Research Service, Cooperative State Research Service, and the Extension Service each presents an overview of work underway in various areas of agricultural research and specifically addresses the productivity research area. These reports have been provided to the Appropriations Committee.

Senator BURDICK. In other words, it is not completed?

Mr. SHERMAN. That is correct. A separate report specifically for this purpose has not been completed.

LOW-INPUT FARMING

Senator BURDICK. Professional farming corners are reporting an increasing interest in low-input farming techniques. Has USDA been involved in research to thoroughly investigate the chemical microbiological effects of low-input farming?

Dr. JORDAN. Mr. Chairman, the Secretary of Agriculture authorized the establishment of an Office of Small-Scale Agriculture during this last fiscal year. In that regard, we are putting together quite a number of efforts, including communication efforts, on what is already available and what can be done to bring together information from many of the research programs that yield results applicable to small-scale agriculture.

Senator BURDICK. The investigation is not complete, is it, at the moment, then?

Dr. KINNEY. Mr. Chairman, I would like to comment briefly on low-input farming. It has been called many things, organic farming and everything else.

Actually, we in ARS are spending upward of $22 million a year that relates directly to low-input agriculture. One component of that is very important, and we are giving attention to it now. It is systems research.

A good example of that in Mississippi is the development of a model that uses all the components related to production of cotton. I am talking about the COMACS model that was tested last year and is being tested again this year on farms. COMACS reduces the cost of production. It saves the producers about $60 an acre by using a system that incorporates everything we know today about cotton.

We are now getting pressure from the peanut people, the tobacco people and everyone else to develop the same kind of system. I think low-input agriculture means many different things to many different people. It is a matter of how you go about minimizing the input.

Do you know about this?

Senator STENNIS. I am innocent.

Dr. JORDAN. Mr. Chairman, if you would permit, I would like to call on my Deputy Administrator who is responsible for this particular area to bring all the pieces together which might help elucidate this just a little bit. His name is Dr. Paul O'Connell.

COORDINATION OF LOW-INPUT FARMING

Dr. O'CONNELL. Thank you, Mr. Chairman. There has been a lot of interest in low-input agriculture, especially in recent months, and there have been several meetings around the country. One particular meeting was held in Racine, WI, recently, where representatives from about seven or eight states came who were doing research on low-input agriculture. Also, there were scientists from the Agricultural Research Service there. For example, in the North Central Area alone, there is about, as I remember, about $20 million just spent in that area related to low-input agriculture.

There are some opportunities here in that if we can reduce the inputs that farmers have to buy and maybe not reduce the yields quite as much, we would increase net returns to the farmer. This approach addresses the profitability issue.

Another aspect of low-input farming is that we can look at the concerns we have about using chemicals more wisely. Also, it addresses conservation issues. So low-input farming has some positive aspects to it. It addresses a number of issues, and a lot of people are looking at the land-grant universities and the Agricultural Research Service for guidance and information.

Senator BURDICK. This is somewhat similar to the no-till procedures. We have had some no tilling out there in my state that has already been successful, and of course, it reduces costs, also.

Dr. O'CONNELL. That is correct.

Senator BURDICK. That is the same theory you are working on.

Dr. O'CONNELL. It is the same kind of principle.

Dr. BENTLEY. Mr. Chairman, one additional footnote to this is that the extension activities are also going on parallel to the efforts and emphasis on research. There are a number of sessions being held throughout the country looking at educational systems; how can we do a better job at mobilizing information that we have now and making it available to people who are interested in low-input farming and agricultural production.

There is a lot of information; there has been a lot of information accumulated over the years. I think it is being, I shouldn't use the word repackaged, but it is being brought together in a little different format so that it will be more useful to people. That also links us into the National Agricultural Library. So there is much going on right now in this area.

Senator BURDICK. Thank you.

ORGANIC FARMING

Please clarify for the subcommittee alternative farming methods by specifying the distinction between low-input or limited-resource agriculture and sustainable agriculture and organic agricultural methods. You touched on that somewhat, but what about organic agricultural methods.

Dr. KINNEY. I think, Mr. Chairman, the response that I made earlier is appropriate. There are places where what I understand is organic farming are very appropriate. I think there are some groups in Pennsylvania and Indiana that use the materials that are generated on the farm through compost, through use of manure and so forth. It is essentially pure organic farming. They use little or no pesticides or herbicides.

But it goes all the way from that up to the several-thousand-acre wheat operations, where it is impossible to have enough cows to produce the organic materials needed, or composts. I come back to the point that I think is very important: A system should not rule out any opportunity at any geophysical location in the country.

So I think it is almost impossible to define them as separate entities if the bottom line is low input.

PLANT SCIENCE COMPETITIVE GRANTS

Senator BURDICK. The fiscal year 1988 budget proposes an increase of $3.3 million for plant science competitive grants. Can you explain the purpose of this funding?

Dr. BENTLEY. Yes; I can outline it briefly. The concept here is that as we look at the plant sciences, it is clear that there is a need for a lot more of what we might call fundamental research on physiology, genetics and biochemistry of plants. This has been identified by numerous studies, particularly from the National Academy of Sciences and going back some 3 to 5 years. The purpose of establishing the competitive research grants in this area is to focus attention on these special needs in the plant science area by utilizing the competitive research grant process and the expertise in universities, Federal agencies and the private sector.

These institutions have been very successful over the years because they have attracted a great deal of private funding and support, primarily because they are dealing with basic plant sciences that will help us understand what kinds of work we might apply in molecular microbiology for application in plants and make them more effective in stress or in drought conditions or disease control, as well as increase their efficiency in the utilization of nutrients. The Plant Science Center is an intellectual center, so to speak. I mean by that, we are not speaking of a physical center, rather, we are speaking about bringing together scientists who can address some of these very important issues that relate to crop production. I am speaking broadly now of vegetables, fruits, grains, corn, soybeans and all of the crops that are of importance to us in this country. We think this is a good approach. It represents a cooperative effort between the basic sciences people from the National Science Foundation and the Department of Energy. USDA especially is putting a great deal of emphasis on photosynthesis.

I believe that is a general overview of what is hoped to be obtained. We will, again, build on the highly successful model that has been used by the National Science Foundation.

PLANT SCIENCE CENTERS

Senator BURDICK. On June 17, 1986, CSRS issued a joint agency agreement with the Department of Energy and the National Science Foundation announcing the establishment of a new competitive awards program in plant science for multidisciplinary basic research and training centers at academic institutions.

The new program would require a 5-year commitment of Federal funding for each center. The first year's cost of the program would be $10 million, to be shared equally by the three agencies signing the agreement. The joint agreement stated, "Each of the agencies would include its share in its proposed budget to OMB."

Secretary Bentley, as one of the three signers of this agreement, can you tell me whether CSRS plans to pursue this new basic research program in plant science or do you have plans to pursue it?

Dr. BENTLEY. Yes; if it is funded, we are prepared to initiate the program whenever the funds are made available so that we can proceed. The discussions are already underway with the National Science Foundation and with the Department of Energy to develop a program announcement and to describe the planning activities that we think should be funded under this competitive system. I think we would be well prepared to move ahead with this initiative when the funds are made available.

Senator BURDICK. Is the funding for this program in the proposed fiscal year 1988 budget?

Dr. BENTLEY. Yes; it is not identified as such in the budget but as part of the increase for the plant science research program.

Senator BURDICK. How much is proposed?

Dr. BENTLEY. Our plan is $3.3 million from Agriculture and an equal amount from Energy and NSF. It is not identified in the writeup as such, but there is an increase in the competitive research grants that would permit us to move ahead with that in the plant sciences.

Senator BURDICK. Shouldn't the funding for these centers be presented as a separate line item in the budget so we know for sure who is getting it?

Dr. BENTLEY. The answer is, yes.

Senator BURDICK. Fine.

SUBMITTED QUESTIONS

We may have some other questions, gentlemen. They will be submitted to you in reasonable time. Until then, we will adjourn.

I suppose other members of the committee may also want to submit some questions. So this concludes today's hearings. We appreciate having you here today to share this concern, our concern with the fiscal year 1988 appropriations for the Department of Agriculture.

Others who will be submitting questions will be Senators McClure, Sasser, Harkin, Kasten, Grassley, Cochran, Thurmond and Bumpers. I would appreciate it if you would respond to them in a rather expeditious manner.

[The following questions were not asked at the hearing but were submitted for response for the record:]

AGRICULTURAL RESEARCH SERVICE

QUESTIONS SUBMITTED BY SENATOR BURDICK

COMMODITY CONVERSION

Question: Secretary Bentley, within the past several years, efforts have been ongoing to use agricultural commodities to produce ethanol and other non-food uses. With regard to ethanol, there have been allegations, wrongly made, that accuse ethanol of being somewhat undesirable for use in engines. Have you done any research in this area? What does it show?

Answer: ARS has not conducted engine testing research using alcohol fuels.

Question: Do you see a need for additional research in this area so that we might promote the increased use of agricultural products in the energy industry?

Answer: I do not see a need for additional research.

Question: Where would you recommend that the emphasis be put?

Answer: A program to provide existing information to ethanol/gasoline distributors and to the potential users of ethanol could be more productive than conducting additional research.

ARS SUGARBEET/SUNFLOWER FACILITY

Question: What is your budget for fiscal year 1988 for ARS for the sugarbeet/sunflower facility?

Answer: Our planned fiscal year 1988 budget for the sugarbeet/sunflower facility at Fargo, North Dakota, is $1,840,500.

Question: What type of research do you expect to carry out at this facility?

Answer: The research will be to reduce the costs of production and improve the market quality of sunflowers, sugarbeets, and cereal grains. Teams of plant geneticists, pathologists, entomologists, and chemists will develop higher yielding germplasm with tolerance to environmental stress, resistance to diseases and insects, and with superior quality characteristics.

Question: I understand that $500,000 will be needed to operate the new building in terms of providing the necessary utilities and other operations and maintenance functions. Is this amount included in the budget request?

Answer: This $500,000 needed to operate the new building is not included in the budget request. However, the requested budget does include a $500,000 increase for Fargo, ND, to expand and strengthen germplasm evaluation and enhancement research for sunflower, sugarbeet, and cereal grains. Some of these funds will be used for facility operational support, which is considered a real research cost.

Question: How many scientists and other employees will be located at the facility?

Answer: We plan to locate 13 USDA-Agricultural Research Service scientists with 11 support technicians and 2 clerical employees at the facility. In addition, there will be 6 North Dakota State University (NDSU) scientists with 3 support employees and 1 clerical position. We also plan to provide research space for up to 8 NDSU graduate students or visiting scientists at the facility.

GRASSHOPPER RESEARCH

Question: In the appropriations report for this year, the Senate stipulated that $60,000 be designated for the continuation for research on the biological control of grasshoppers at North Dakota State University. How much money are you sending out to NDSU for this project?

Answer: We are cooperating with NDSU with $54,000 for grasshopper research.

Question: I understand that of the $60,000 you indicate that $6,000 must be used to cover indirect programs support cost. The intention of the Senate report was to send $60,000 for the research at NDSU because that is what is required to carry out a credible project. Why aren't you sending the full $60,000?

Answer: ARS assesses all program funds to pay for program and administrative support.

Question: Please provide me a detailed list of the indirect support cost that you are taking out of the $60,000.

Answer: The $6,000 goes to pay program and administrative support costs at the Agency Headquarters level.

Question: Can I anticipate that you will send the full $60,000 this year?

Answer: The net to location funding for NDSU will be $54,000 in fiscal year 1987.

Question: I also understand that you have notified the researchers of this project that the program will be terminated at the end of fiscal year 1987. Why?

Answer: The need to supplement ARS research on this grasshopper pathogen no longer exists. Any additional research required will be done by scientists assigned to the Interagency Grasshopper IPM program in North Dakota and Idaho.

Question: Has the project reached its goal?

Answer: Yes, the NDSU project has largely reached its goal and is expected to be complete by the end of fiscal year 1987.

Question: Don't you see a possibility of using the results from this research in the Integrated Pest Management project being conducted on grasshoppers?

Answer: Yes, this information will be used by ARS scientists in support of the Interagency Grasshopper IPM project in western North Dakota and southern Idaho. The NDSU project in its final year will be focused to contribute the IPM project.

GRASSHOPPERS

Question: The Animal and Plant Health Inspection Service is heading up an Integrated Pest Management project to deal with grasshopper control. I know that ARS is involved in this project and that several different control methods will be tested.

What is the status of the research being done on the grasshopper fungus Entomophaga grylli and do you expect that this research may be put to use during the IPM project?

Answer: The fungus Entomophaga grylli is a major mortality factor in grasshopper populations. Research will concentrate on locating grasshopper habitats where this pathogen is revalent. The ability to predict population declines caused by the disease will be important in reducing chemical treatments. Foreign pathotypes of this disease will be investigated for possible introduction into study sites.

It is fully expected that this research will constitute a key component of the IPM project.

Question: Please explain ARS's role in the IPM project.

Answer: The IPM project will begin in 1987 with APHIS as the lead agency. ARS and other Federal agencies (ERS, FS, BLM, FWS, EPA) will be active cooperators and participants. The specific ARS role will be to transfer technology from previous grasshopper research, as well as to conduct new research and field evaluations in support of the overall project.

POTATO RESEARCH

Question: Could you summarize for the Committee the type of potato research you are doing across the country? Specifically, what aspect of the potato is being addressed by each project; where the research is being done; and the amount of funding for it?

Answer: We have research on potatoes at 10 locations with emphasis in the following areas: Genetics and cytogenetics; evaluation of exotic potato germplasm for important horticultural characteristics; breeding for disease and insect resistance, increased yields, nutritional quality, and consumer acceptance; germplasm preservation and maintenance; protoplast fusion and other genetic engineering techniques for transfer of genetic material; genetic variation in plants from tissue culture; physiology of plant growth and use of bioregulating compounds; effect of plant stress on growth, yield, and nutritional quality of potatoes;

prediction of potato quality in bulk storage facilities; physical properties associated with quality of processed potatoes; food processing; nature of host plant resistance to major diseases and other pests; biology and control of golden and root-knot nematodes; biological control and integrated pest management of potato insects, diseases, and nematodes; and identification and control of disease and insect pests. This research relates to the potato plant, the underground tuber, and handling, storage, and utilization of the potato for human consumption.

The estimated level of funding by location for fiscal years 1987 and 1988 is shown in the following table:

Location	FY 1987 Estimated	FY 1988 Estimated
Aberdeen, ID	$306,700	$316,800
Beltsville, MD	1,783,800	1,892,500
Orono, ME	266,000	274,700
East Grand Forks, MN	405,500	418,800
Ithaca, NY	378,000	390,400
Wooster, OH	48,000	49,600
Wyndmoor, PA	902,200	931,900
Yakima, WA	377,900	390,300
Prosser, WA	758,500	783,400
Madison, WI	650,700	672,100
Total	5,877,300	6,120,500

Question: Do you recommend increases in any of these areas and, if so, where?

Answer: We do not recommend increases in any of the areas of research at this time.

Question: Are you familiar with a proposal put together by the National Potato Council for increased potato research?

Answer: Yes, we are familiar with the proposal.

Question: In their proposal, they outline 9 areas of research which need additional attention. Putting aside the question of funding the research, for the moment, do you agree with the Council that additional research is needed in these areas?

Answer: We believe additional research is needed in some of these areas identified by the National Potato Council.

Question: The Council identified the research on ring rot disease to be the number one priority. Do you agree with its assessment of this disease?

Answer: There has been considerable research conducted in the past on ring rot and we currently have an extramural research agreement with North Dakota State University for additional research. With this past and existing research, we would not consider research on ring rot as being the highest priority for additional research to serve the needs of the U.S. potato industry.

The solution to the problem of ring rot requires the application of good sanitation practices rather than more research.

Question: The 9 areas that were identified by the Potato Council include ring rot disease; early dying disease; aphids; potato beetle; weeds, varietal development; agricultural engineering; soils; and marketing.

What priority would you give to each of these if additional research funding were made available for potatoes?

Answer: From the viewpoint of national priorities and solving current or potential problems of the potato industry, we would put these 9 research areas in the following order of priority - agricultural engineering, variety development, potato beetle, early dying disease, soils, aphids, weeds, ring rot, and marketing.

Question: In the Senate Report for fiscal year 1987 (99-438), the Committee expressed hope that potato research being conducted at East Grand Forks, Minnesota, could be expanded. At that time, ARS officials acknowledged that expansion of the research at this facility was justified. Has this expansion taken place? To what degree?

Answer: We recognize the need to strengthen the research on agricultural engineering and potato storage and handling at East Grand Forks but at this point we have been unable to make any expansion.

Question: What is proposed for the facility for fiscal year 1988?

Answer: We propose to continue the current research program, with certain modifications, and continue at about the same level of funding. The estimated levels of funding for fiscal year 1987 and 1988 are $591,100 and $606,700, respectively.

USER FEES

Question: You propose to implement user fees which would collect $500,000 from commercial users of your germplasm collection. Has this legislation been drafted and, if so, could you please provide the Committee with a copy?

Answer: No legislation has been drafted. Based on further study of the issue in recent months, further efforts to develop this legislation have been discontinued.

Question: How do you envision this proposal to be implemented?

Answer: There is no activity currently underway to develop legislation to charge user fees for the distribution of germplasm.

Question: I understand that there is a lot of give and take in the germplasm community. We receive germplasm from others including many foreign countries in return for some foreign germplasm. How would the user fee proposal affect this situation?

Answer: The U.S. position of advocating free exchange of germplasm to bona fide scientists worldwide would be further questioned and challenged. We are already having to deal with the less developed countries' perspective that the U.S. and other developed Nations are involved in germplasm imperialism. They would question when the user fees would be extended to them.

Question: If we were to inflict user fees on some of those who need to use our germplasm, does that mean we would no longer receive it back in return?

Answer: Yes, it could trigger user fees from foreign countries and could result in denial of germplasm needed by this Nation. Also, public-private sector relations in the U.S. would suffer and we would expect reductions of capital support and donations of germplasm by the private sector to the national collections.

GERMPLASM

Question: Last year, Dr. Kinney, you indicated that the Department was proceeding with the preparation of an environmental assessment of the Germplasm program. Have you completed that assessment? Could you please make it available to the Committee?

Answer: Yes, the Environmental Assessment was completed in November of 1986. Copies will be made available to the Committee.

GERMPLASM COLLECTION, MAINTENANCE AND EVALUATION

Question: Could you please describe for the Committee the difference between collection, maintenance and evaluation of germplasm?

Answer: Collection includes all of the activities associated with introducing germplasm into the country such as coordinated exchanges, plant exploration, plant introduction office database and registry, and quarantine. Maintenance involves activities associated with the preservation of germplasm such as growing out plants and harvesting and storing fresh seed under optimum conditions or, in the case of vegetatively propagated plants, culturing them as live plants in the field or in tissue culture. Evaluation includes the assessment and documentation of all of the important physical and biological traits of the plant such as plant height, stalk strength, disease and insect resistance, and quality traits to name a few.

Question: You indicated a need for an increase of $7,347,000 for these activities. How does this break down between each of the three activities?

Answer: We are asking $350,000 for collection activities, $2,746,000 for maintenance, and $2,987,500 for evaluation. The remaining balance, $1,263,500, we are asking for enhancement which is a germplasm activity transferring beneficial traits from raw germplasm and wild relatives into types usable by the breeder.

Question: Could you list the major commodities that benefit from this germplasm activity and the amounts that are allocated to each of these commodities?

Answer: The major crop commodities and their present germplasm funding are:

Commodity	FY 1987 Estimated
Citrus	$1,241,300
Corn	216,400
Cotton	1,398,100
Deciduous & Small Fruit & Nuts	1,882,000
Forage	674,600
Grain Sorghum	291,100
Miscellaneous & New Crops	557,400
Multiple Commodities	4,034,400
Oilseed & Oil Crops	334,400
Ornamentals & Turf	831,000
Peanuts	257,200
Potatoes	570,200
Range & Pasture	257,200
Rice	273,500
Seeds	560,100
Small Grains	751,900
Soybean	1,210,700
Sugar Crops	191,500
Tobacco	46,900
Trees & Forest Products	284,200
Vegetables	1,417,700
Wheat	1,504,200
Total	18,786,000

Question: Could you also break down the increase that you propose by the commodities listed above?

Answer: The proposed FY 1988 germplasm increases for the major commodities are as follows.

Commodity	FY 1988 Increases
Citrus	--
Corn	$580,000
Cotton	--
Deciduous & Small Fruit & Nuts	200,000
Forage	350,000
Grain Sorghum	--
Miscellaneous & New Crops	--
Multiple Commodities	3,020,000
Oilseed & Oil Crops	200,000
Ornamentals & Turf	200,000
Peanuts	--
Potatoes	50,000
Range & Pasture	150,000
Rice	150,000
Seeds	1,000,000
Small Grains	498,500
Soybean	150,000
Sugar Crops	200,000
Tobacco	--
Trees & Forest Products	--
Vegetables	50,000
Wheat	548,500
Total	7,347,000

RHIZOMANIA RESEARCH

Question: How much is the Department spending on rhizomania in fiscal year 1987 and what is proposed for fiscal 1988?

Answer: The estimated funding for rhizomania in fiscal year 1987 is $355,400 and $367,000 in fiscal year 1988.

Question: Where is the research conducted?

Answer: All of the rhizomania research is conducted at Salinas, California.

Question: What progress has been made?

Answer: We have made good progress on rhizomania research. By evaluating sugarbeet germplasm collected many years ago in Europe, we have now located genes tolerant to this virus disease. It is anticipated that new germplasm lines will be developed and released to private industry in the next few years so that future crop losses to rhizomania will be greatly reduced. We also are making good progress in the study of the virus organism, its strains and mutations, and its relationship to a soil borne-fungus that acts as a vector.

HARD RED SPRING AND DURUM WHEAT QUALITY LABORATORY

Question: Recently, two vacancies have opened up at the ARS Hard Red Spring and Durum Wheat Quality Laboratory in Fargo, North Dakota. This laboratory has made significant contributions to the wheat and agriculture economy of the upper Midwest. In my view, it is essential that the work performed at this laboratory be continued.

Have the positions which have opened up been filled? If so, by whom? If not, why not?

Answer: The two positions at the Wheat Quality Laboratory have not been filled. However, recruitment is actively underway and the positions have been advertised.

Question: What has the funding level been for fiscal years 1986, 1987, and what is proposed for fiscal year 1988?

Answer: The funding level for fiscal year 1986 was $286,800. Funding for fiscal year 1987 is $296,100, and funding for fiscal year 1988 is estimated at $307,800.

BARLEY

Question: I understand that one of the researchers will be retiring at the Madison Barley Research Laboratory in July, 1987. Will you be filling this position?

Answer: After careful evaluation of available funding in this research unit, we have determined that this position can be refilled.

Question: Last year, you told me that you had no plans to reduce support for ARS barley research. Does this commitment still stand?

Answer: We are committed to maintaining at least our current level of support for barley research.

Question: Also, last year at our hearings, you indicated that you were going to be turning your attention to the barley yellow dwarf virus. How has this attention been manifested to date?

Answer: ARS research on barley yellow dwarf virus has concentrated on virus-vector interaction, virus characterization, vector physiology, and increasing levels of tolerance in enhanced germplasm.

Question: Are you taking a more active role in coordination of the barley yellow dwarf virus research? If so, what have you done?

Answer: ARS scientists have been among the most respected specialists working with this important disease since 1957. It does not seem appropriate, though, to characterize our role as one of coordination.

Question: Last year, you indicated that you hoped to intensify your activity in the barley yellow dwarf virus research. What have you done to intensify your efforts?

Answer: The proposed increases for FY 1988 include $180,000 to be directed toward understanding the biochemical and physiological mechanisms associated with tolerance to barley yellow dwarf virus and, ultimately, more effective evaluative procedures.

Question: Of the increase proposed for germplasm activities, is any of that proposed for barley germplasm work?

Answer: Yes, the amount of the proposed increase for barley is $234,500.

Question: How much money is currently allocated towards barley germplasm work?

Answer: Current allocations for barley germplasm activities total $370,600. An additional $1.6 million relates to other types of barley research, including genetics, pathology, and gene transfer.

COOPERATIVE STATE AGREEMENTS

Question: How much money do you distribute to the various States in cooperative agreements to do research?

Answer: The Agricultural Research Service does not distribute funds to the States using a formula or pre-established criteria. We do enter into cooperative agreements with organizations within a State to accomplish mission based research. In addition, the Agricultural Research Service provides funds to States through Research Support Agreements to obtain necessary services and support.

Question: To what States does this money go, for what purpose, and in what amounts? Please provide this information for fiscal year 1987 and as proposed for fiscal year 1988.

Answer: The Agricultural Research Service enters into extramural agreements to obtain research and support services to accomplish its research mission. Extramural research is carried out under all six program objectives: Plant Productivity, Animal Productivity, Soil and Water Conservation, Commodity Conversion and Delivery, Human Nutrition and Integration of Agricultural Systems. Extramural funds are used to supplement or compliment ongoing research where expertise or specialized equipment and/or facilities is unavailable inhouse. The following table lists the amounts and States involved in ARS research and research support activities.

Fiscal Years 1987 and 1988
(Dollars in 000's)

State	Research Agreements	Research Support Agreements
Alabama	$317.4	—
Alaska	110.0	$140.0
Arizona	140.5	205.2
Arkansas	111.9	71.6
California	265.2	504.5
Colorado	202.4	148.4
Delaware	5.0	81.6
Florida	987.5	769.6
Georgia	149.5	1,064.8
Hawaii	311.7	105.1
Idaho	280.8	912.9
Illinois	148.5	466.2
Indiana	--	431.3
Iowa	73.9	540.4
Kansas	--	296.8
Kentucky	660.4	29.2
Louisiana	37.1	71.9
Maine	25.0	74.0
Maryland	579.9	664.8
Massachusetts	280.0 1/	--
Michigan	10.0	379.0
Minnesota	--	788.8
Mississippi	--	597.0
Missouri	77.8	270.2
Montana	--	460.2
Nebraska	--	2,236.9
Nevada	--	47.1
New Jersey	27.0	170.0
New Mexico	--	40.5
New York	205.7	168.8
North Carolina	67.5	476.0
North Dakota	194.3	2,860.4
Ohio	61.6	198.8
Oklahoma	391.3	255.2
Oregon	218.3	151.1
Pennsylvania	196.3	196.5
Puerto Rico	--	142.0
South Dakota	5.0	2.7
Tennessee	--	61.5
Texas	1,366.6 2/	364.6
Utah	85.2	243.5
Virginia	--	81.3
Washington	405.4	784.6
West Virginia	32.0	489.3
Wisconsin	68.5	963.1
Wyoming	20.0	64.0
Total	8,119.2	19,071.4

1/ Excludes GOCO contract with Tufts University which operates Agricultural Research Service's Human Nutrition Research Center on Aging.

2/ Excludes cooperative agreement with Baylor University which operates Agricultural Research Service's Children's Nutrition Research Center.

Question: Of the money that is used in this manner, how much goes for the actual research and how much is used to cover department overhead and other indirect program support costs? Please provide these amounts for each of the States in each of the years requested in the previous question.

Answer: Most institutions charge the statutorily established limit for assessing indirect research costs of 10% for Research Support Agreements. Indirect costs are non-allowable under ARS research agreements with State cooperative institutions.

HIGH CONTAINMENT POULTRY RESEARCH LABORATORY

Question: Recently, you submitted to this committee a study of the needs for a High Containment Poultry Research Facility. In that study, you indicate that such a facility is an absolute necessity for research on Newcastle and Avian Influenza without endangering the poultry industry. Is the research of this nature absolutely necessary?

Answer: Yes, this research is necessary. Newcastle and Avian Influenza are diseases that threaten the existence of the U.S. poultry industry.

Question: Does your budget request contain the $2.5 million needed for the addition of such a laboratory at the Southeast Poultry Research Laboratory?

Answer: No, our budget request does not contain the $2.5 million needed for such a facility.

Question: Do you support inclusion of this research proposal in the fiscal year 1988 budget? If so, do you expect to amend your budget request?

Answer: No, we do not propose the inclusion of this proposal in the fiscal year 1988 budget. We do not expect to amend our budget request at this time.

HUMAN NUTRITION

Question: Please provide for the Committee information on the human nutrition labs funded by the Agricultural Research Service. Where they are; what their funding level is; how many staff are located there; in what research do they specialize; as well as their funding needs for fiscal year 1987 and proposed for fiscal year 1988.

[The information follows:]

Human Nutrition Research Centers
(In thousands of dollars)

Human Nutrition Centers	FY 1987	ARS FTE	FY 1988	ARS FTE
Beltsville Human Nutrition Research Center, Beltsville, MD	$7,412	107	$7,621	107
Composition of foods for those nutrients required and biolgically useful to humans.				
Human requirements for and metabolic roles of protein and amino acids, carbohydrates, lipids, minerals, and vitamins, and identification of forms of these nutrients in foods that are useful in meeting human requirements.				
Grand Forks Human Nutrition Research Center Grand Forks, ND	5,917	31	5,978	31
Nutritional requirements for zinc, cadmium, nickel, copper, and other minor elements and their relationship to optimal health, function and performance.				
Physiological and biochemical factors influencing minor element requirements in all age groups.				
Biological availability of minerals and effects of nutritive and non-nutritive factors in foods on availability.				
Human Nutrition Center on Aging at Tufts University Boston, MA	12,120	4	12,128	4
Nutritional requirements of the elderly for optimal health, function, and performance.				
The relationship of nutrition to the aging process.				
Role of diet in the function of major chronic degenerative conditions.				

Human Nutrition Centers	FY 1987	ARS FTE	FY 1988	ARS FTE
Children's Nutrition Research Center at Baylor College of Medicine, Houston, TX	4,881	1	4,883	2
Nutrient requirements in infants, children, pregnant and lactating women.				
Role of diet for optimum growth and physical and mental development.				
Western Human Nutrition Research Center, San Francisco, CA	3,764	42	3,846	42
Development of reliable, efficient, inexpensive methods for defining nutritional status.				
Developing nutritional criteria for design and evaluation of intervention programs.				
Identification of factors, forces, and trends resulting in malnutrition.				
Planning and conducting research on human nutritional requirements.				
Total Human Nutrition Centers	$34,094	185	$34,456	186

SUNFLOWER RESEARCH

Question: Can you tell me what the ARS budget contained for sunflower research and where the research was conducted for fiscal years 1986, 1987, and proposed for 1988?

Answer: The locations and funding of sunflower research are as follows:

Location	FY 1986 Available	FY 1987 Estimated	FY 1988 Estimated
Albany, CA	—	$163,100	$168,500
Dawson, GA	$2,000	---	--
Peoria, IL	26,800	59,700	61,700
Ames/Ankeny, IA	149,100	147,200	152,000
Mississippi State, MS	14,700	15,200	15,700
Fargo, ND	577,300	599,500	819,200
Mandan, ND	---	88,400	91,300
Bushland, TX	197,500	199,700	206,300
Madison, WI	34,100	---	--
Total	1,001,500	1,272,800	1,514,700

FORAGE SEED RESEARCH CENTER

Question: How much is proposed in the budget for operations at the Forage Seed Research Center at Corvallis, Oregon?

Answer: The estimated FY 1987 budget for operations of the Forage Seed Production Research Center at Corvallis, Oregon, is $1,028,300.

OILSEED RESEARCH

Question: As noted in last year's Senate Report (99-438), a shortfall was noted on oilseeds research at Fargo, North Dakota. The Committee directed the Department to alleviate this situation by providing adequate funding. What has been provided for fiscal year 1986 and what is being provided for fiscal year 1987?

Answer: Funding of the Oilseeds Research Unit at Fargo, North Dakota, for FY 1986 was $519,400. The estimated funding for FY 1987 is $538,000.

Question: What is proposed for this research in fiscal year 1988?

Answer: Estimated funding of the Oilseed Research unit for FY 1988 is $741,500.

REPAIR AND MAINTENANCE OF FACILITIES

Question: Could you please provide for the committee a detail of how the $10,552,000 for repair and maintenance of facilities is being allocated for 1987?

Answer: The $10,552,000 represents not only repair and maintenance, but also energy retrofit costs of facilities. The planned allocation of these funds in fiscal year 1987 follows:

Location	Allocation
Alabama	
Auburn	$12,000
Arizona	
Phoenix	79,500
Tucson	12,000
	91,500
California	
Albany	310,000
Colorado	
Fort Collins	78,500
Florida	
Orlando	580,000

Location	Allocation
Georgia	
Athens	200,000
Watkinsville	33,000
Tifton	200,000
	433,000
Idaho	
DuBois	157,000
Illinois	
Peoria	86,000
Urbana	14,000
	100,000
Indiana	
West Lafayette	200,000
Iowa	
Ames	3,220,000
Louisiana	
Houma	10,000
Maryland	
Beltsville	1,957,074
Minnesota	
E. Grand Forks	5,500
Morris	30,000
St. Paul	25,000
	60,500
Mississippi	
Oxford	15,000
Stoneville	70,000
	85,000
Missouri	
Columbia	145,000
Montana	
Sidney	98,000
Nebraska	
Clay Center	169,000
Lincoln	60,000
	229,000
New Mexico	
Las Cruces	178,000
New York	
Plum Island	475,000

Location	Allocation
North Dakota	
Mandan	30,000
Oklahoma	
El Reno	119,000
Durant	20,000
Woodward	33,666
	172,666
Oregon	
Burns	137,860
Corvallis	47,000
	184,860
Pennsylvania	
University Park	125,000
Wyndmoor	1,030,000
	1,155,000
South Carolina	
Florence	125,000
Texas	
Bushland	69,500
College Station	93,000
Kerrville	77,400
Lubbock	25,000
	264,900
Wisconsin	
Madison	200,000
GRAND TOTAL	10,552,000

REPAIR AND MAINTENANCE OF FACILITIES

Question: How was the fiscal year 1986 amount allocated?

Answer: The amount for repair and maintenance including energy retrofit costs that were obligated in fiscal year 1986 is as follows:

Location	Amount
Arizona	
Phoenix	$23,320
Colorado	
Akron	7,122
Ft. Collins	32,308
	39,430
District of Columbia	13,480

Location	Amount
Florida	
Canal Point	106,367
Ft. Lauderdale	381
Gainesville	459,202
Miami	65,363
Orlando	38,762
	670,075
Georgia	
Athens	94,743
Watkinsville	97,019
	191,762
Idaho	
DuBois	173,394
Kimberly	18,627
	192,021
Illinois	
Peoria	459,877
Urbana	10,000
	469,877
Indiana	
West Lafayette	10,172
Iowa	
Ames	375,657
Louisiana	
Houma	27,895
New Orleans	471,710
	499,605
Maryland	
Beltsville	3,547,724
Michigan	
East Lansing	31,090
Minnesota	
St. Paul	2,520
Mississippi	
Mississippi State	10,010
Oxford	110,934
	120,944
Montana	
Miles City	3,791
Sidney	1,000
	4,791
Nebraska	
Clay Center	159,695

Location	Amount
New Mexico	
Las Cruces	103,150
New York	
Ithaca	30,227
Plum Island	842,753
	872,980
North Dakota	
Mandan	24,742
Ohio	
Coshocton	14,430
Oklahoma	
Stillwater	9,998
Oregon	
Burns	9,962
Pennsylvania	
University Park	8,061
Wyndmoor	759,091
	767,152
South Carolina	
Charleston	72,091
Florence	14,214
	86,305
South Dakota	
Brookings	70,000
Texas	
Bushland	224,842
College Station	242,076
Lubbock	92,489
	559,407
Washington	
Pullman	7,000
Wisconsin	
Madison	7,600
West Virginia	
Beckley	304,029
Wyoming	
Cheyenne	67,324
GRAND TOTAL	9,256,242

REPAIR AND MAINTENANCE OF FACILITIES

Question: What is the proposal for allocating the $10,552,000 for fiscal year 1988? Please provide the information by ARS location.

Answer: Decisions on the projects and locations for receipt of funding in fiscal year 1988 on repair and maintenance and energy retrofit have not been finalized at this time.

Question: What is the general condition of the facilities in each of these areas?

Answer: The capacity of the facilities to support the research mission of ARS ranges from barely adequate to state-of-the-art. However, because of the rapid advances in technologies associated with various kinds of research, many, if not most, of the facilities need upgrading to keep pace with increased research requirements.

Question: Please provide details on the facilities' age and major renovations that have occurred or are needed.

Answer: Facilities range in age from 1 year to 50 years old with an average age of approximately 35 years old. The Agricultural Research Service has constructed many new facilities since its establishment in 1953. A few of the recent projects were new facilities at Kearneysville, West Virginia; Beckley, West Virginia; Boston, Massachusetts; Plum Island, New York; Madison, Wisconsin; Lane, Oklahoma; Stillwater Oklahoma; Oxford, Mississippi; and Houston, Texas, which is not yet completed.

In terms of major renovations within existing Agency authorities, we are concentrating our efforts at ARS locations where priority research programs are being conducted. Activity in 1987 is occurring in the following facilities that were built in the 1940's, 1950's and 1960's:

	Location	Type of Construction	Estimated Cost
1.	Western Regional Research Center Albany, CA	Alteration, Repair and Maintenance	$5.3 Mil
2.	Bldg. 006 Beltsville, MD	Alteration, Repair and Maintenance	1.7 Mil
3.	Bldg. 007 Beltsville, MD	Repair and Maintenance	4.1 Mil
4.	National Animal Disease Center Ames, IA	Repair and Maintenance	3.4 Mil
5.	Miami, FL	Office/Laboratory Headhouse/Greenhouse	.8 Mil
6.	Gainesville, FL	Fume Hood Retrofit and Roof Replacement	1.0 Mil

Although we do not have a complete inventory of major renovations that are needed, planning discussions are occurring in the following locations:

	Location	Type of Construction
1.	Plum Island Animal Disease Center Greenport, NY	Consolidation of Facilities
2.	Western Regional Research Center Albany, CA	Alteration, Repair and Maintenance
3.	Northern Regional Research Center Peoria, IL	Alteration, Repair and Maintenance
4.	National Animal Disease Center Ames, IA	Repair and Maintenance
5.	Beltsville Agricultural Research Center Beltsville, MD	Alteration, Repair and Maintenance

UNIFORM ALLOWANCES

Question: Why do you propose elimination of the appropriations language which limits uniform allowances?

Answer: Provision for uniform allowances is provided under 5 U.S.C. 5901 at a maximum amount of $125.00 annually per employee required to wear uniforms.

Question: What is the authorization for uniform allowances that you cite in your explanatory notes?

Answer: The appropriation language for fiscal year 1985 provided authorization for a maximum of $400.00 annually per employee.

Question: Do you support a different limit? If so, what limit?

Answer: We have relied on the limit contained in the Appropriation Language for certain Agricultural Research Service employees.

PURCHASE OF LAND

Question: You also request to delete language which would apply to the purchase of land at Fresno, California. Please explain this provision and the reasons for its deletion.

Answer: This language change is to delete the provision to purchase the land at Fresno, California, since funds are not available for this purpose.

SCIENTIFIC REVIEW OF INTERNATIONAL ISSUES

Question: You request a change to delete language pertaining to the transfer of funds to the Office of the Assistant Secretary for Science and Education for the scientific review of international issues involving agricultural chemicals and food additives. Was this transfer made?

Answer: In fiscal year 1986, Agricultural Research Service made the funds available to the Office of the Assistant Secretary for Science and Education for the scientific review of international issues involving agricultural chemicals and food additives. Obligations incurred were $3,529.

Funds will again be made available for the completion of this activity in fiscal year 1987.

EMPLOYMENT

Question: What is employment under 5 U.S.C. 3109?

Answer: Under this statute agencies may, when authorized in an appropriation or other statute, employ experts and consultants temporarily (1 year or less) or intermittently without regard to the laws for the competitive service, position classification, and the General Schedule pay grades.

The Agricultural Research Service presently does not have anyone appointed under this authority.

MARKETING RESEARCH

Question: How much money is currently spent on marketing research?

Answer: Agricultural Research Service estimates spending $22,167,800 in fiscal year 1987.

BUILDING LIMITATION COSTS

Question: What is the purpose and effect of the following appropriation language:

> "The cost of constructing any one building shall not exceed $150,000, except for headhouses connecting greenhouses which shall each be limited to $500,000, and except for ten buildings to be constructed or improved at a cost not to exceed $275,000 each, and the cost of altering any one building during the fiscal year shall not exceed 10 per centum of the current replacement value of the building or $150,000, whichever is greater."

Answer: The purpose and effect of this language is to provide specific cost limitations for specialized research facilities as provided by the appropriation language process.

RESEARCH FACILITIES FOR EXOTIC FOREIGN ANIMAL DISEASES

Question: What is affected by the appropriation language:

> "The foregoing limitations shall not apply to replacement of buildings needed to carry out the Act of April 24, 1948 (21 U.S.C. 113a)."

Answer: This language provides for the establishment of research laboratories for foot-and-mouth disease and other animal diseases. The Secretary of Agriculture is authorized to establish research laboratories, including the acquisition of necessary land, buildings, or facilities, and also the making of research contracts under the authority contained in section 427(a) of Title 7, for research and study, in the United States or elsewhere, of foot-and-mouth disease and other animal diseases which constitute a threat to the livestock industry of the United States.

BUILDINGS AND FACILITIES

Question: You have proposed to rescind $28,000,000 in fiscal year 1987 funds that have been designated for Buildings and Facilities. This rescission will run out shortly if Congress does not enact it. If Congress does not enact the proposed rescissions, will the money be made available immediately for its intended use?

Answer: Should the proposed rescissions not be enacted, the funds will be made available through a grant process by the Cooperative State Research Service.

Question: For each of the projects proposed for rescission, would you please provide the Committee with further explanation on why the project and the funds are not needed?

Answer: As part of the Agricultural Research Service's effort to meet the deficit reduction goals of the Balanced Budget and Emergency Deficit Control Act of 1985, it was determined that the projects were of low priority and would not contribute significantly to the mission of the Agricultural Research Service. The projects involved are: The Plant and Animal Science Research Center, University of Illinois, Urbana, Illinois; Wheat Marketing and Demonstration Laboratory, Portland, Oregon; and the Feasibility Study, Plant Science and Educational Satellite Video Communications Center at Kansas State University, Manhattan, Kansas.

NATIONAL SEED STORAGE LABORATORY - FT. COLLINS, COLORADO

Question: You indicated that the National Seed Storage Laboratory is nearing capacity. When do you expect the laboratory to be filled?

Answer: At the present rate of acquisition, the facility will be completely full by 1989.

Question: What are the functional deficiencies that you refer to?

Answer: The functional deficiencies include insufficient seed vault capacity to store the seed acquisitions, insufficient space for database, office, research and seed testing activities, an outdated refrigeration and air handling system, and lack of opportunity to incorporate modern handling and storage technologies.

Question: How long do you expect construction of the proposed new laboratory to take?

Answer: We expect that it will take close to 4 years to complete the project. The design phase will start in January 1988 and will take 1 year. The competitive bidding/contract award process will immediately follow the design phase and will take approximately 4 months. Actual construction is expected to begin in May 1989, and will take 2 years.

Question: What was ARS' original cost estimate for construction of this laboratory?

Answer: ARS' original estimate was for $19.6 million for planning, design, and construction of the facility. However, that rough estimate reflected a different total project scope than is requested in the budget request. Our request will be adequate to address the critical space and functional needs at the seed storage laboratory.

Question: Is the normal practice to provide ten percent of the total cost for the initial planning and design of such a building? If so, what would ten percent of the total cost for this laboratory be?

Answer: Yes, it is customary to allow approximately ten percent for planning and design. The 1988 budget request is for $1 million which agency planners translate into a $10,000,000 addition and renovation. Certain equipment costs would be in addition to that level.

NATIONAL SMALL GRAINS GERMPLASM FACILITY --- ABERDEEN, IDAHO

Question: What is the status of the construction of this project?

Answer: The design phase of this project is 95 percent complete.

Question: When do you expect it to be completed?

Answer: The design is expected to be completed by mid-April of 1987. The construction contract is scheduled for award in the third quarter of fiscal year 1987, and completion of actual construction is scheduled in the second quarter of fiscal year 1989.

Question: Upon completion, what are you estimating to be the cost of transferring the facilities?

Answer: We don't have an estimated cost at this time. The special documenting, packing of germplasm accessions, the unpacking and storing at the receiving end and shipping costs are being worked up now. These costs will be considered in conjunction with other priority needs for the fiscal year 1989 budget.

QUESTIONS SUBMITTED BY SENATOR CHILES

CITRUS CANKER

Question: Citrus canker has been recognized as a serious threat to the citrus industry. A program has been initiated to provide answers to pressing problems in canker research. What is the status of the research program? Are you satisfied with the program?

Answer: Yes, we are satisfied with the program. We have made considerable progress on the biology of the bacterial pathogen, how it spreads, the range of crops it can infect, methods to detect it on trees and on fruit in marketing channels, and on evaluating chemicals for control of the disease in groves. These research findings have contributed to the recent establishment of a more liberal regulatory policy and has resulted in the destruction of fewer trees.

Question: In what areas have you cooperated with IFAS, University of Florida?

Answer: The ARS has cooperated with IFAS on many aspects of the research, such as the pathogen--how it spreads, its epidemiology, and in developing controls for the disease. ARS supports this research financially with a specific cooperative agreement funded at $641,900 in FY 1987.

TROPICAL AGRICULTURE

Question: What is the current status of ARS programs dealing with tropical agriculture?

Answer: We continue to have programs in Puerto Rico and Hawaii on tropical/subtropical research. In Puerto Rico, emphasis is on germplasm evaluation and improved variety development of tropical crops, improved production and cultural practices, and educational and training programs. The research in Hawaii is on the development of improved quarantine treatments to insure that marketed tropical fruits are free of insect pests. The estimated level of funding for tropical and subtropical agriculture is $718,600 in fiscal year 1987 and $742,100 in fiscal year 1988.

Question: Is ARS maintaining its commitment to research of interest to the tropics?

Answer: Yes, we will continue to maintain our commitment to research on tropical and subtropical agriculture.

AQUATIC WEEDS

Question: What progress has been made in reducing the deleterious impact of aquatic weeds on inland waterways and lakes?

Answer: Excellent progress has been made in the development of control technology for aquatic weeds. Biological control agents have been instrumental in reducing waterhyacinth in several States including Florida and Louisiana. In Louisiana reductions of 50 to 75 percent or approximately 900,000 acres have been reported. Reduction of as much as 80 to 90 percent of affected acres have been reported in Florida due to both biocontrol agents and chemical treatment.

The first releases of a tuber feeding weevil, a new biological control agent for hydrilla, are planned for May 1987 and the grass carp continues being used to a limited extent. Another insect for control of hydrilla is in advanced evaluation in Florida. In addition, testing of chemical control agents continues with a new safe material with very low application rates giving promising results.

TROPICAL AGRICULTURE

Question: You have many research programs on specific commodities in Florida which are beneficial to the State and region, such as small grains, soybean, sugarcane, citrus, etc. As individuals in these programs retire in the future, do you plan to maintain these programs at their present level?

Answer: To the extent that our appropriations allow, we plan to collectively maintain the current level of funding of ARS programs in Florida.

QUESTION SUBMITTED BY SENATOR SASSER

PLANT GERMPLASM

Question: Dr. Kinney, I am interested in the progress we are making in the field of germplasm, and especially our efforts to ensure that we have a sufficient seed storage program to protect the interests of American agriculture.

You have noted that the Agricultural Research Service (ARS) is seeking $1 million for expansion of the National Seed Storage Laboratory in Fort Collins, Colorado. The grain industry is also seeking a similar facility, as they have proposed a small grains germplasm program to be located in Aberdeen, Idaho. Does ARS plan to assist in the development of this program, also?

Answer: The ARS facility, which is about to be constructed at Aberdeen, Idaho, will house the active, or working, collection of wheat, oats, barley, and rice. The proposed expansion of the National Seed Storage Laboratory at Fort Collins, Colorado, is to accommodate the long-term, or base, collections of all plant species which we preserve as seed. The materials to be stored at Aberdeen and Fort Collins represent critically important, but very different, components of the National Plant Germplasm System for which ARS has lead responsibility.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

SOUTH CENTRAL SMALL FARMS RESEARCH CENTER

Question: Dr. Kinney, what is the status of the permanent facility for the South Central Small Farms Research Center at Booneville, Arkansas?

Answer: Construction of the new office-laboratory building is nearly complete and we plan to occupy it in April of this year.

Question: I believe that Booneville could be an outstanding source of research and extension activities by working with ongoing efforts at alternative crop production in eastern Arkansas. Do you agree?

Answer: We certainly do. With our new facilities, existing research programs, and cooperation with the surrounding States, there should be many opportunities for working on alternative crop production in eastern Arkansas and other areas.

Question: How is ARS planning on coordinating its small farms research work in western Arkansas with expanding vegetable production by cooperatives in eastern Arkansas?

Answer: By cooperating with research and extension personnel in Arkansas and other States, it is hoped that our research at Booneville will help the expanding vegetable production in eastern Arkansas and other areas in the South Central States. We plan to have our scientists continue to confer with State, local, and industry officials in the determination of industry needs and how our research can be used to meet those needs.

Questions Submitted by Senator Cochran

RESEARCH AND DEVELOPMENT BUDGETS

Question: The January issue of Science News has a summary of major Federal agency research and development budgets. Defense, of course, ranks number one with $42 billion for R&D budgets, but agriculture is at the bottom with only $780 million. (See attachment) I have difficulty understanding how we can continue to say that American agriculture must become more competitive in world markets in order to survive and yet we maintain a declining budget for cost-cutting agricultural research and education programs that are absolutely essential and fundamental to the ability of the American farmers to compete in world markets. Do you share my concern in this regard, Dr. Bentley?

FY 88 PROPOSED FEDERAL RESEARCH AND DEVELOPMENT BUDGETS*
(January 20, 1987)

Preliminary summary of major agency research and development budgets (in billions of dollars).

	Total R&D			
Agency	FY 86	FY 87	FY 88	% Change '87 to '88
Defense	33.6	36.6	42.0	+14.7
Total non-defense	18.4	21.1	20.4	- 3.2
National Institute of Health	5.0	6.0	5.5	- 8.8
National Science Foundation	1.3	1.4	1.7	+18.6
Department of Energy	4.7	5.0	4.7	- 6.0
NASA	3.5	3.8	4.7	+22.3
Agriculture	0.9	0.9	-	-
ARS	0.49	0.53	0.54	+ 3.0
CSRS	0.28	0.31	0.24	-21.9

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* Source: SCIENCE NEWS, January 10, 1987 and USDA 1988 BUDGET SUMMARY

Answer: I'm glad you raised this issue, Senator Cochran, and I welcome the opportunity to respond. While we have been constrained by overall spending targets in recent years, the USDA research budgets have reflected the high priority this Administration places on research and education programs. The fact is budget increases have been recommended for high priority research and education programs at a time when other programs within the Department are slated for major reduction.

We are proposing increases for basic formula programs for research and extension. These programs provide stable support for research and education assistance essential to assuring the competitive posture of American farmers. Funding for vitally needed basic research under the competitive grants program has increased by 150 percent since 1984. We are proposing a 10 percent increase in this program for FY 1988, part of which will support a program of plant science research jointly funded by the National Science Foundation and the Department of Energy.

Resources for in-house research conducted by the Agricultural Research Service have increased by 10 percent since 1984 and we are proposing a 5 percent increase for FY 1988. These increases have allowed us to initiate a $10 million program of research to investigate new uses and export markets for surplus agricultural commodities. Results of this research hold the promise of developing major new markets for surplus commodities. Other increases have funded additional research on plant germplasm, animal science and human nutrition.

I should also point out that much of the apparent decrease in research spending can be attributed to the elimination of funding for a number of construction programs which were not originally a part of the Administration's request. In the Cooperative State Research Service alone, one-half of the $68 million decrease from 1987 is due to this factor. Other decreases in university research support focus on earmarked programs primarily of local interest which may be funded through base formula allocations or local sources if accorded a high priority by the States. Reductions proposed for the extension budget primarily target earmarked programs not directly supporting agricultural producers.

FOOD SAFETY RESEARCH

Question: Dr. Kinney, how much is being spent on food safety research?

Answer: In FY 1987 our budget for food safety research will total $20 million, including the amounts for feed safety research in animals.

Question: Does the Food Safety and Inspection Service (FSIS) do any research of this type?

Answer: The Food Safety and Inspection Service does not conduct research. They do have methods development programs, both chemical and microbiological, which are closely related to ARS research.

Question: Is this amount adequate in view of all the problems we have with food poisoning?

Answer: We consider this amount to be adequate for the USDA to assure the continued safety of agricultural products.

FIRE ANTS

Question: As you are aware, the imported fire ant is a serious concern in my part of the country. The cooperative fire ant control program that APHIS had been involved in with States and local entities was phased out for lack of an effective, wide-scale control agent. In your statement, you indicate that ARS is evaluating new and acceptable chemical baits to help control the imported fire ant. Also, research in biological control has begun at Stoneville, MS. Are there target dates for completion of these projects?

Answer: The research program in biological control at Stoneville, Mississippi, is housed within the Southern Field Crops Insects Management Laboratory and the Southern Weed Science Laboratory. The emphasis within the entomology laboratory is on controlling pests attacking field crops, for example the bollworm or corn earworm using predators, parasites, and pathogens. Emphasis in the weed science laboratory is on controlling weeds through the use of native pathogens. Biological control research for imported fire ants is conducted at the Insects Affecting Man and Animals Research Laboratory, Gainesville, Florida, in cooperation with counterpart agencies in Brazil and, most recently, at the ARS facility in Argentina. ARS research on the chemical control of imported fire ants has resulted in four commercially available products, Amdro, Logic, Affirm, and Prodrone, which are registered for use by homeowners and for broad application to nonagricultural lands. Other potential products are in various stages of evaluation and development. Chemical control research is ongoing, and when potentially effective and environmentally safe compounds with new modes of action are discovered, these also will be evaluated. Biological control research is long range and is dependent on the discovery of suitable and potentially effective organisms in their native habitats in South America.

Question: How close are we to development of an effective, wide-scale control agent?

Answer: Effective chemical control agents are now available; however, strategies for their use in wide-scale control programs still must be developed. In part, this depends on the manufacturer's ability to obtain approval from the Environmental Protection Agency for the use of available products on agricultural lands. In the meantime, ARS is conducting research to devise more effective and environmentally safe methods and formulations for use in wide-scale control programs.

Question: What do we need to do to encourage timely completion of these projects?

Answer: ARS is moving as rapidly as possible within the environmental licensing and regulatory constraints.

BRUCELLOSIS

Question: In your examples of progress in ARS research on animal productivity, you indicate progress in understanding how Brucella bacteria survive in white blood cells. You state that understanding this may lead to progress in controlling brucellosis.

Answer: It is true that we have made progress in understanding how Brucella bacteria survive in white blood cells and this way escape from the host's response directed against them. The two chemicals produced by Brucella and responsible for this phenomenon are being characterized at the present time. Attempts are being made to devise a method for the neutralization of these chemicals therefore making Brucella vulnerable to the cow's normal immune system.

ANIMAL FAT REDUCTION

Question: You also mention a breeding program to match genetic potential of diverse breeds of cattle with market opportunities for low-fat beef products. How close are you to implementation of this idea?

Answer: Research information is available to reduce fat in cattle by fitting breeding programs to different feed resource situations. These breeding programs and fat-trimming techniques are currently being used by the beef industry. The extent to which the present technology to reduce fat is being implemented by the industry is affected by consumer demands for lean, but adequately marbled beef, and cost of production.

The President's proposed budget includes an increase of $1.2 million in the FY 1988 budget to initiate additional research to reduce fat in beef, pork, lamb, and poultry. The areas of research will include the use of recombinant DNA techniques, alteration of the nutritional composition of animal diets, and development of predictive models to maximize the efficient production of desirable lean meat.

SOYBEAN RESEARCH

Question: Agricultural research is needed to stimulate demand for soy protein and oil in the world market. In your statement you mention that ARS scientists have discovered a bacterium that changes glycerol--a soybean product--into a chemical used to make industrial polymers, including acrylic plastics. Last year, in your answers to questions, genetic engineering of the soybean to produce lauric acid was cited as a long-term technically viable approach. (Lauric acid is a major ingredient used by detergent, soap, pharmaceutical, and cosmetic industries. Imports of lauric acid sources--coconut and palm kernel oils--exceeded 200 million dollars in 1983.) What is the status of each of these projects?

Answer: Development of the process that utilizes a bacterium to convert glycerol to acrylic acid has been completed and a patent is in preparation.

Research on conversion of soybean and other vegetable oils to lauric acid is underway at both our Albany, California, and Peoria, Illinois, research centers.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

BIOTECHNOLOGY

Question: I am glad to see the continued commitment by ARS to the continued emphasis on biotechnologies. I agree that this will be a major factor in assuring American competitiveness in the future. I urge the Department to use the funds for biotechnologies to research the reduction in input costs and the use of agriculture products for non-food purposes in an effort to provide greater profit margins and new markets for our agricultural producers. Could you provide for me a list of biotechnology projects currently funded through ARS which are intended to reduce input costs to farmers?

Answer: ARS has over 200 projects using biotechnology in the research program. The following projects are examples of the research that the agency is doing that may result in reduced input costs to farmers.

LOCATION	TITLE
Beltsville, MD	Identification and Characterization of Disease Resistance Genes and Gene Products of Wheat
Beltsville, MD	Genetic Modification of Florist and Nursery Crops Utilizing Tissue Culture and Biotechnologies
Beltsville, MD	Improving Efficiency of Transgenesis in Livestock
Kearneysville, WV	Fruit Germplasm Improvement Through Molecular Biology/Gene Transfer Technology
University Park, PA	Biochemical Determinants for Apomixis and Disease Resistance in Forage Species
Peoria, IL	Genetic Engineering of Rumen Microorganisms
Ames, IA	Paratuberculosis (Johne's Disease) of Cattle
Ames, IA	Respiratory Disease of Swine

Ames, IA	Improved Methods for the Diagnosis of Bovine Brucellosis
Ames, IA	Reproductive Disease of Swine
Clay Center, NE	Embryo Production, Splitting and Sexing, and Utero Placental Relationship in Cattle, Sheep and Swine
Columbia, MO	Pathology and Microbial Control of Insect Pests
East Lansing, MI	Insertion of Genes into the Chicken Germline
Fargo, ND	DNA Vectors for Genetic Engineering of Pest and Beneficial Insects for Improved Field Crop Protection
Albany, CA	Application of Improved Biotechnology Techniques for Transfer of Plant Stress Resistance
Pasadena, CA	Physiology and Biochemistry of Sugarcane and Citrus Plant Development
Salinas, CA	Develop Controls for Soil Microorganisms and Viruses Involved in Rhizomania of Sugarbeet
Laramie, WY	Molecular Biology of Orbiviruses to Diagnose and Characterize Bluetongue Virus
Pullman, WA	Molecular Characterization of the Scrapie Agent and the Development of a Diagnostic Technique
Bozeman, MT	Biological Control of Great Plains Grasshoppers and Mormon Cricket
Prosser, WA	Genetic and Cytogenetic Studies on Gene Transfer in Potatoes
Kerrville, TX	Immunological Responses of Hosts to Cattle Grubs and Biting Flies
Mississippi State, MS	Insect and Nematode Resistance of Corn in the South
Raleigh, NC	Molecular Genetics of Disease Resistance to Fungal Pathogens of Soybeans
Charleston, SC	Production Efficiency of Vegetable Crops Through Nematode and Disease Resistance
Athens, GA	Development of Diagnostic Tests for Avian Influenza and Exotic Newcastle Disease

NATIONAL SMALL GRAINS GERMPLASM FACILITY -- ABERDEEN, IDAHO

Question: I am happy to see and greatly encourage the Department's efforts to expand the plant germplasm collection and facilities. I look forward to the day that the Aberdeen Germplasm Facility for the working collection is completed and fully staffed. I noticed that the Department has requested that the language in the FY87 appropriations report language be deleted. I see no reason to delete this language and will propose language in the FY88 report to the same effect as it was my understanding that the facility was to be completed in 1988. Could your office please provide me with an updated construction schedule for the facility and the expected completion date?

Answer: The updated schedule calls for the construction contract to be awarded in the third quarter of fiscal year 1987, and the construction is to be completed in the second quarter of fiscal year 1989.

BARLEY

Question: Dr. Kinney, I would specifically like to express my pleasure in seeing that the ARS budget request for 1988 includes increased funding for crop germplasm collection, maintenance and evaluation and the increase in research on a decrease in fats in beef, pork, lamb and poultry. These areas are of critical concern and are areas where ARS can provide excellent scientific support.

Barley is an important crop in Idaho, in 1986 Idaho was third in the nation in barley production. I am very interested in the barley research program both nationwide and in Idaho as funded by ARS. ARS spending on plant germplasm has been steadily increasing the past few years with another increase proposed for FY 88. However, funds for barley germplasm evaluation have held steady at $100,000 per year. Of the $6.9 million increase proposed for FY 88, how much will go to barley germplasm evaluation and enhancement?

Answer: The amount of the proposed increase for barley is $234,500.

Question: Last year, we discussed the need for the ARS to take a more active research role in eliminating the barley yellow dwarf virus (BYDV) threat to stable barley and wheat production in the U.S. I encouraged the ARS to implement a coordinated BYDV program with a key component of such a program being a BYDV research and diagnostic center. Such a center would require modern instrumentation and minimum staffing of one PhD researcher and a technician. What is the status of the ARS efforts with BYDV?

Answer: ARS is currently addressing the BYDV problem by investigating virus-vector relationships, virus characterization, and vector physiology, and by enhancing the level of tolerance in breeding lines. Urbana, Illinois, is a key location in this effort and the proposed increase for FY 1988 would expand this effort. Although ARS has not, to this point, considered itself the coordinator of a national BYDV effort, our scientists have been leaders in a cooperative effort. We recognize the difficulty of screening for this disease and we are seriously considering expanding the potential of the Urbana program to screen cooperators' lines. We do not, however, feel a responsibility to establish a center to diagnose the disease. There are standard serological techniques by which any virologist can make such diagnoses.

Question: It is my understanding that the ARS barley researcher at Aberdeen (Dr. Darrell Wesenberg) with responsibilities for barley germplasm and varietal development has been promoted to Research Leader at the location. This promotion will result in a larger portion of his time being devoted to administrative duties, with less time available for the continuation of the active and productive research program that he has developed. It appears that the addition of a M.S. level research specialist position to his barley research program may be needed to insure that the program of barley research currently being conducted can be maintained.

Does the ARS have plans to add such technical support to the ongoing barley research program at Aberdeen?

Answer: No plans exist in 1987 to add technical support to the barley research program at Aberdeen.

Question: The barley research program at Aberdeen relies on the USDA Cereal Crops Research Unit (CCRU) at the University of Wisconsin to provide quality data on the experimental barley varieties that it develops, to provide basic research information on malting quality and to develop analytical procedures to evaluate quality. Maintenance of a strong research program at this facility benefits Idaho. It is my understanding that a full-time PhD researcher at this facility is retiring. If this position is not filled, the reduction in staffing will weaken the research efforts of the CCRU.

What does ARS plan to do with this position? If plans are to fill this, what is the time horizon?

Answer: We plan to begin our recruitment process soon after the retirement.

Question: I am pleased to see that the ARS is strengthening its small grains research efforts at the Aberdeen Research and Extension Center (which is in addition to the work and staffing to be associated with the USDA National Small Grains Collection) as evidenced by the recent addition of two full-time research positions, one devoted to wheat and one devoted primarily to oats. It is my understanding that the ARS is planning on rounding out this staffing with a third full-time position, devoted to barley research.

Does the ARS have plans for such a position? If so what is the timetable for filling this position?

Answer: At the completion of our 2 year agreement with the University of Idaho to fund their wheat breeding position, we will fill the barley position. We are consulting with groups such as the National Barley Improvement Committee and the American Malting Barley Association in deciding what specific area of scientific expertise we will want to emphasize.

U.S. SHEEP EXPERIMENT STATION

Question: On another subject, I would like to know what plans ARS has for upgrading the Dubois Sheep Experiment Station, when the new Head of the Station will be named, and how much money ARS plans to direct toward the Station for upgrading the equipment and machinery, research facilities, and buildings at the Station? It is the only range sheep research facility in the United States and should not be forgotten in the budget process.

Answer: The USDA-ARS Dubois Sheep Experiment Station is the only ARS research program that has a critical mass of scientists and resources to conduct range sheep research. The new Head of the Dubois station is scheduled to report June 7, 1987. As part of the budget process, ARS has been increasing the funds for the program of research and for the upgrading of equipment and facilities. The base funding for the program of research has been increased from $1,216,300 in FY 1986, to an estimated $1,580,400 for FY 1988. Within the same time period, an additional $338,000, outside the base budget, has been provided for renovation of buildings, feeding equipment, and grain storage facilities. ARS expects to continue strong support for the Dubois station to ensure the continuance of research that is of high priority to the sheep industry.

DARK END OF POTATOES

Question: I want to thank you and the other ARS staff who worked with my office in finding a funding source to address a potentially devastating problem in the Idaho, Oregon, and Washington potato industry - dark end syndrome. I was happy to see that $350,000 of funds at the Kimberly research station were devoted for dark end research. My staff visited the Kimberly station and discussed the progress on this problem. They have felt some impact on other major programs as addressed in the Senate Report. Are there any plans to increase their funds to help offset this impact?

Answer: We have no plans to increase the funding for research at the Kimberly location. It is our belief that this redirection of resources to the dark end potato syndrome will help solve the problem and still allow a satisfactory level of research on other major programs.

KIMBERLY, IDAHO

Question: It was pointed out to my staff, in discussions with local Soil Conservation District representatives, that the local land owners who lease lands to the Kimberly station might be willing to sell some of the lands which the Station has been using for long term research projects. Does ARS prohibit such land acquisition?

Answer: It is ARS policy to limit purchase of lands for research purposes to land which is unique in having special characteristics essential to the research or to situations where there would be a cost savings to the government in buying rather than leasing.

Question: If it could be proven that it would be more profitable in the long run to purchase some of the adjacent lands which budget areas would the funds be placed in?

Answer: The Agricultural Research Service appropriation is the proper budget area.

GRASSHOPPER RESEARCH

Question: Finally, I would like to address the Integrated Pest Management Research program ARS is involved in along with APHIS, Forest Service, Fish and Wildlife, BLM and the National Park Service. I have heard from several Idaho constituents concerning the allocations of the ARS sections of the APHIS moneys. Could you review for me the program to be granted to Colorado State University?

Answer: Colorado State University (CSU) will receive $354,000 from APHIS for FY 1987 as a cooperative agreement. CSU will conduct a program on environmental monitoring, assessing the impact of the grasshopper IPM program on non-target fish and wildlife organisms. This information was requested by the U.S. Fish and Wildlife Service, EPA, and the National Park Service.

QUESTIONS SUBMITTED BY SENATOR KASTEN

GROUNDWATER QUALITY

Question: Dr. Kinney, the impact of pesticides on groundwater quality is a problem of growing concern in Wisconsin. There is an urgent need for research into how dangerous various pesticides are, how they get into groundwater, how quickly they break down, how farmers can minimize the danger of contaminating wells and so forth.

Obviously, many different agencies (such as EPA, the National Science Foundation, and Extension) share responsibility for groundwater research. Could you take a moment to outline what ARS is doing in this area?

Answer: ARS research related to pesticides in groundwater includes: improvement of pesticide application technology to enhance pesticide efficacy and reduce ground contamination; determination of the role of soil microbes in degrading soil-applied pesticides; evaluating effects of soil and environment on pesticide persistence, movement, and activity in soil; development of improved technology to control annual weeds in corn and soybeans and minimize groundwater contamination; determination of the fate and importance of pesticide residues; and development of a root zone water quality model which will help select best management practices to avoid pollution of groundwater with agricultural chemicals. We are currently reviewing the pesticide, water, and soil portions of our research program to determine gaps in knowledge needed to improve management of agricultural chemicals.

BARLEY

Question: I also have a question relating to the Cereal Crops Research Unit (CCRU) at the University of Wisconsin at Madison. As you know, the malting and brewing industry that is so important to Wisconsin, as well as barley growers in the Chairman's home state of North Dakota, depend on the CCRU for quality data on experimental barley varieties, as well as for research on malting quality and other subjects.

For this reason, I am pleased that ARS has allocated an additional $50,000 to alleviate a serious funding shortfall in FY 1987. This action is appreciated and will help the CCRU in its effort to become a center of excellence in barley and oat research.

Another part of that effort, obviously, is adequate staffing. I am concerned about reports that ARS plans not to fill a position at CCRU when Dr. Neville Prentice retires in June of this year. I would like to emphasize my feeling that this position should be retained on a permanent basis, and filled by a researcher with expertise in a field related to barley.

Could you supply the Subcommittee with your view of this situation?

Answer: We are also anxious to refill the position currently occupied by Dr. Prentice with a permanent position. We did not want to refill the position unless we could adequately support it, but the additional $50,000 of which you spoke will allow us to refill the position.

DAIRY FORAGE RESEARCH

Question: Dr. Kinney, your help in securing adequate funding for the Dairy Forage Research Facility at Madison and Prairie du Sac, Wisconsin has been greatly appreciated in the past. We have an excellent facility that is doing valuable work in improving the utilization of alfalfa and other forages.

As you know, the Dairy Forage Program is now funded at about half the level envisioned when it was established with the help of my colleague from Wisconsin, Senator Proxmire, in the late 1970's. Recognizing the fiscal constraints that exist, could you give us your view of the long-run future of the Dairy Forage Program?

Answer: The addition of two scientists will bring the Dairy Forage Research facility at Madison to the planned staffing level. This would complete the formation of broad based interdisciplinary research teams at Madison. These teams are required to develop the knowledge and technology bases needed by the dairy industry to fully exploit use of forage for production of milk.

We are regularly reviewing and evaluating the dairy forage program in order to focus available ARS resources on the high priority needs of the dairy industry.

ARS has an excellent productive research program established at the U.S. Dairy Forage Research Center. This program should provide much of the information that will be needed in the future by the dairy industry to insure efficient forage utilization and milk production.

In recent years, the dairy industry has encouraged ARS to put more emphasis on product utilization and research for value-added products.

QUESTIONS SUBMITTED BY SENATOR GRASSLEY

TEKTRAN

Question: Dr. Kinney, I want to compliment you on what I believe to be a correct observation, that "Research .. is valuable only when it is applied by users". You mentioned your TEKTRAN computer system. How many people use that system?

Answer: Currently, more than 300 private firms of all sizes have direct access via telephone to TEKTRAN and more are being added each week. In addition, all State Cooperative Extension Services, a number of university researchers, and many Federal agencies have direct access to the latest Agricultural Research Service discoveries via TEKTRAN.

Question: In what ways could this system be used to directly assist farmers?

Answer: A few farmers have requested and been granted direct access to TEKTRAN so that they can keep abreast of the latest ARS research findings. It is probable that many more farmers will access TEKTRAN directly utilizing their own microcomputers. However, it is expected that the majority of farmers will benefit from TEKTRAN indirectly through its use by private firms and other organizations which serve farmers. For example, all State Cooperative Extension Services have access to the new research results on TEKTRAN via a computer linkup with the Cooperative Systems Information Network's Research Results Database (RRDB). This linkup was established for all states on January 1, 1986. Currently, more than 3,000 brief reports on new research results from the Agricultural Research Service are available on the Extension computer network.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

BIENNIAL BUDGET CYCLE

Question: Calls for budget reform are increasingly heard as budget deadlines are too often missed, important budget decisions are delayed, appropriation bills and other direct spending legislation are held up in committee, and omnibus spending bills take the place of timely and orderly consideration of individual bills. One procedural reform that is being considered is the two-year budget cycle where budget and appropriations matters would be considered in the first year, and authorizations and oversight would be undertaken in the second year. Would your department/agency favor a biennial budget process? What benefits would your agency achieve in a two-year appropriation cycle?

Answer: The Agricultural Research Service (ARS) would favor a biennial budget process. This process would allow ARS to spend more time on more substantive issues rather than the more procedural efforts tied to the annual budget cycle. More effort would be given to the implementation of program and resources to enhance efficiency, effectiveness and reprogramming requirements.

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: Most of the research program conducted by ARS is relatively predictable and not subject to unanticipated, unforeseen problems. The research program carried out by the Agency could be planned and budgeted within a biennial budget system.

Question: What difficulties can you foresee in preparing and submitting a two-year budget to the Congress?

Answer: ARS foresees no difficulty operating within a two-year budget cycle.

Question: If you oppose the biennial budget concept, please give this subcommittee your reasons why.

Answer: ARS does not oppose the biennial budget process.

QUESTIONS SUBMITTED BY SENATOR THURMOND

CHARLESTON, SOUTH CAROLINA

Question: Dr. Kinney, what is the status of the Agricultural Research Service's vegetable research laboratory in Charleston, South Carolina?

Answer: The facility we have at Charleston was originally built in 1935 and has the capacity to accommodate 14 scientists. We presently have a staff of 14 scientists at the facility. The facility lacks certain equipment and special use areas which could be beneficial to the research programs. The estimated level of funding in fiscal year 1987 is $2,221,200 and $2,305,400 is estimated for fiscal year 1988.

Question: Dr. Kinney, has a feasibility study for the new facilities at the vegetable research laboratory in Charleston been conducted and, if so, are you prepared to initiate the design work on those new facilities?

Answer: We have met with Clemson University officials and with leaders of the vegetable industry on program and facility needs for the future. A feasibility study is essentially complete. Funds for further development of a project at this location are not available and have not been requested.

COOPERATIVE STATE RESEARCH SERVICE

QUESTIONS SUBMITTED BY SENATOR BURDICK

REGIONAL RESEARCH PROJECTS

Question: Regional Research Projects would be increased by $1.8 million under the President's Budget Request. Please tell us how CSRS would spend this money.

Answer: Cooperative Regional Research was developed to stimulate and facilitate inter-state cooperation on research of a regional and national character both among State Agricultural Experiment Stations and with USDA and other agencies. It focuses on specific and important problems of concern to agriculture in two or more States. The increase would be used to address priority issues such as, restoring agriculture and forestry profitability, new food and non-food uses of agricultural products and water quality and management. These are major U.S. challenges which require the integration of physical, biological, economical and management knowledge and technologies into systems that will reduce input costs, and enhance productivity and product quality.

Question: What States would receive these additional funds?

Answer: A budget increase would be shared with all States and allocated by CSRS to projects based on review and recommendation from the Committee of Nine, a statutory Federal advisory committee.

HIGHER EDUCATION

Question: How does the number of agricultural scientists and professionals required for the future compare to the present day?

Answer: We expect total requirements to be roughly the same as today. A recent USDA report entitled "Employment Opportunities for Graduates in Agriculture, Natural Resources, and Veterinary Medicine" shows deficiencies of expertise in key fields relative to the future well being of this Nation.

Question: What is the expected shortage of graduate professionals in Agriculture and Natural Resources, Veterinary Medicine and Home Economics in the next ten years?

Answer: More than 48,000 employment openings are projected annually in the United States for new college graduates with expertise in agriculture, natural resources, veterinary medicine, and closely allied fields. Yet, fewer than 44,000 qualified college graduates are anticipated each year, resulting in a residual shortfall of about ten percent. Annual demand for persons having doctoral degrees or postdoctoral experience in biochemistry, molecular biology, genetics, food science, nutrition, and plant/animal/soil sciences is expected to be very strong. Likewise, there will be strong employment opportunities available to qualified graduates in business and finance, institution management, and marketing.

Question: Do you believe that this shortage will have an impact on our ability to meet future challenges in the field of agriculture?

Answer: The report on employment opportunities that was referred to, indicates strong demand not only for the biological sciences, but also for qualified graduates in business and finance, institution management and marketing. These findings represent a continuation of trends first identified in the 1980 USDA report providing an analysis of supply/demand relationships for graduates of higher education in the food and agricultural sciences.

Question: How can we act now to assure that training is available to all graduate and doctoral students interested in the agricultural sciences?

Answer: Colleges of Agriculture and Natural Resources are working diligently to improve their recruitment and retention programs, to augment faculty development opportunities, and to strengthen curricula. Many are working in concert and are sharing resources for the solution of mutual problems. However, these efforts alone are not sufficient to overcome the generally held view of higher education in the food and agricultural sciences as being strictly related to production agriculture. This image problem cannot be overcome solely at the institutional level. Rather, substantial progress will require considerable effort by the entire food and agricultural system. Furthermore, increasing competition from other disciplines like computer science, engineering, and the medical sciences for the diminishing pool of academically outstanding science oriented students is exacerbating the situation.

MORRILL-NELSON FUNDS

Question: The Explanation of Programs submitted with the budget recognizes that Morrill-Nelson funding has remained stable at $50,000 per institution for many years. Could you please inform the subcommittee of the activities these funds provide?

Answer: These funds are currently used by land-grant institutions to support food and agricultural sciences faculty salaries, curricula development, and other instructional program operating expenses. All food and agricultural sciences programs at land-grant institutions are eligible for this support, including programs in agriculture and natural resources, home economics, forestry, and veterinary medicine. The current appropriation for this program is $2.8 million -- $50,000 per state.

GRADUATE TRAINING GRANTS

Question: Graduate training grants of $2.8 Million were appropriated in Fiscal Year 1987. Would you please tell the committee how many students were awarded graduate training grants in Fiscal Year 1986 and are anticipated to receive grants in Fiscal Year 1987?

Answer: Funding in 1986 was used to provide the third and final year of training for the 259 doctoral fellows appointed originally in 1984 when the program was initiated. Also funded initially in 1984 were 43 master's fellows. In FY 1987, we anticipate supporting approximately 55 academically outstanding doctoral students --U.S. citizens-- for three years of training in two targeted specializations characterized by shortages of expertise.

Question: What institutions do these students attend?

Answer: These 302 fellows were supported at some 47 different institutions in 35 States across the Nation.

Question: Is there any other specific federal program that provides direct support to pre-doctoral students in the agricultural sciences with grant awards and graduate fellowships?

Answer: The graduate fellowship program is unique in that it specifically targets areas where shortages of expertise are projected and supports newly recruited graduate students in those areas. No other program is administered in this manner. There are, however, research grants which indirectly contribute to the development of scientific expertise.

1890 COLLEGES AND TUSKEGEE UNIVERSITY

Question: The Administration's budget request for Fiscal Year 1988 includes a $98,000 increase in funds for the 1890 Colleges to strengthen overall programs in Food and Agricultural Sciences. How was it determined that these institutions should receive a funding increase in light of reductions in all other higher education programs funded by CSRS?

Answer: In recent years, research and extension programs and facilities at the 1890 land-grant institutions have been strengthened through the provisions of Sections 1444 and 1445 of P.L. 95-113, as amended, and Section 1433 of P.L. 97-98. A stable funding base for resident instruction at these institutions is needed to ensure a strong overall program in the food and agricultural sciences. This increase will maintain the funding level at the full $2 Million which was the appropriated level prior to the reduction made in fiscal year 1986 due to Gramm-Rudman-Hollings. Support for programs at 1862 land-grant institutions is provided indirectly through the Competitive Research Grants program and through the provisions of the Hatch Act and related formula base funded programs. We are proposing increases in these programs for 1988.

HIGHER EDUCATION

Question: What percentage of the scientists and professionals currently employed by the following organizations earned graduate degrees from U.S. colleges of agriculture and natural resources, veterinary medicine, or home economics?

Agricultural Research Service (ARS)

Extension Service (ES)

State Agricultural Experiment Stations

Answer: Data are not available to facilitate identification of the specific university administrative units --colleges-- through which Agricultural Research Service --ARS-- and Cooperative Extension Service --CES-- personnel were awarded degrees. Data are available, based on original personnel appointment forms, denoting college major. However, summarization would be a complex, costly, and lengthy endeavor due to the thousands of personnel across all three areas of employment.

Generally, major fields of study which are considered valuable background for employment in ARS, CES, and SAES include such specializations as: Agricultural Engineering, Agronomy, Animal Science, Entomology, Microbiology, Plant Science, Soil Science, Food Science, and Nutrition. Colleges of Agriculture, Forestry, and Veterinary Medicine have long been recognized as the Nation's major producers of expertise in these specializations.

Question: What percentage of the scientists and professionals currently employed by the following organizations will reach the age 65 during the next decade?

Agricultural Research Service (ARS)

Extension Service (ES)

State Agricultural Experiment Stations

Answer: By FY 1997, 26 percent of Agricultural Research Service research scientists and 19 percent of Cooperative Extension Service scientists and professionals, will reach age 65. Data are not available for the State Agricultural Experiment Stations. However, it is reasonable to assume that these university faculty are very similar to teaching faculty for whom a recent USDA report indicates that by 1993, between 25 and 36 percent of all faculty in nine of seventeen disciplines will be eligible for retirement, with the greatest impact, 30 percent or more, on the areas of Veterinary Science, Animal Sciences, and Soil Sciences.

Question: Of the scientists and professionals employed by the following organizations, what proportion are women? What portion are minorities?

Agricultural Research Service (ARS)

Extension Service (ES)

State Agricultural Experiment Stations

Answer: Thirty-six percent of the Cooperative Extension Service staff are women and nine percent are minorities. The Agricultural Research Service currently employs 2,644 research scientists; 10 percent of whom are women and 6 percent of whom are minorities. Although specific employment data are not available for the State Agricultural Experiment Stations, their employment practices are assumed to be similar to the Agricultural Research Service.

AGRICULTURAL PRODUCTIVITY RESEARCH

Question: What are the findings submitted with respect to alternative agriculture?

Answer: Several aspects of agricultural research, extension education and information programs relate to alternative agricultural production systems, which is the essence of Subtitle C of the 1985 Food Security Act. A broad array of State and Federal research activities is aimed at understanding the fundamentals of soil and crop production processes, associated information, and technology transfer. Limited but important emphasis has been placed on evaluation of management system alternatives compared with more conventional practices of relying on purchased chemicals, especially for pest control and plant nutrition. Alternative production systems are site specific and research and development must include different soil, climate, and crop management conditions across the United States.

The interest in research and education for these types of programs has increased very rapidly, partly because of the low profit margin in farming, but also because the growing concerns about pollution and potential pollution of soil and water resources emphasize the urgency for extensive information which can be used to prevent such pollution, and still make a profit from farming.

Question: What ongoing research projects is the Department involved in relating to alternative agriculture?

Answer: New thrusts in alternative or low-input systems include coordinating and technical committees in the Northeast and North Central regions, numbered NEC 70 and NCT 152, respectively. These multi-state and State-Federal, multi-agency efforts are to explore the feasibility of establishing regional research projects. Other related regional research and individual projects in many States have been underway for several years on questions such as: legumes in conservation tillage systems; nitrogen fixation by legumes; gains and losses of nitrogen in soils; manure management; sludge application on agricultural and forest lands and its impacts on quality of soil, water, food, and feed; fate of pesticides and other organic chemicals in soils; and crop sequence or rotation experiments.

The Cooperative State Research Service --CSRS-- USDA is cooperating with North Carolina State University on a study to identify and classify types of publications on alternative systems for the dual purpose of assessing what is available and determining areas having few dependable reports and publications. This study relates directly to Section 1464, Subtitle C. A complementary study is nearing completion on scope, opportunities, and the status of relevant research in areas of alternative agriculture. This evaluation study, funded by USDA, was conducted by The Board on Agriculture of the National Academy of Sciences.

CSRS in cooperation with Iowa State University has subclassified State and USDA research projects entered into the Current Research Information System --CRIS-- to facilitate examination of research relevant to alternative farming systems. This study culminated in the Iowa Agricultural Experiment Station Special Report 91 entitled, "Conventional and Organic - Related Farming Systems Research." It shows where research efforts were focused and the sources of funding support in fiscal year 1982. Fiscal years 1983, 1984, and 1985 data, now being processed, will reflect changes in research emphasis for conventional and alternative cropping systems.

The Agricultural Research Service --ARS-- USDA has on-going research programs relating directly to Subtitle C at several locations including biological control of insects, diseases, and weeds. Also, resistance to nematodes, pathogens, or insects is an objective of virtually all State and USDA crop breeding projects. An ARS scientist located at the Rodale Research Center in Pennsylvania, is adapting a nitrogen/tillage model to alternative crop production technology.

In areas of biological control of potential chemical pollutants, scientists at the ARS Pesticide Degradation Laboratory at Beltsville, Maryland, are working to develop bacteria capable of converting pesticide residues to harmless substances. Microorganisms have been identified as being effective in degrading the two largest classes of chemical pesticides--organophosphates and methylcarbamates.

Cooperative USDA-State investigations in Nebraska into the use of legumes in conservation tillage systems have shown supplemental nitrogen needs of dry land corn can be met by using hairy vetch as a winter cover crop before the corn. Therefore, if legume nitrogen were substituted for all or part of fertilizer nitrogen for irrigated corn, nitrate leaching into the Ogallala aquifer could be reduced.

The Extension Service --ES-- USDA has identified "Alternative Agricultural Opportunities" as one of its eight national priorities. A task force has been formed to guide this nationwide effort, and ES has a staff member on the Editorial Board of the American Journal of Alternative Agriculture.

The National Agricultural Library --NAL-- USDA has inaugurated the Alternative Farming Systems Information Center to provide information to those interested in obtaining popular or scientific literature. It is serving farmers, gardeners, extension agents, conservation technicians, and the general public. The center continues to issue current bibliographies covering most of the topics of interest for alternative agricultural production systems.

These nationwide efforts of CSRS, the State Agricultural Experiment Stations, ARS, NAL, and ES are much broader than discussed. The examples given are samples of the large amount of excellent research that can and does serve as a data base for information development and determination of priorities for needed research.

Question: What funding is being used and where is the activity located?

Answer: Funds to support research, extension education and information programs are from State, Federal, and non-Federal sources. The activities are located in most areas of the United States but the magnitude of efforts is not uniformly distributed. Development of farmer-decision support information on alternative systems is difficult due to its complexity, and time consuming because of the long term nature of effects and the endless permutations of variables.

The Iowa Special Report 91 on assessment of research on problems relevant to conventional and organic or alternative farming systems summarizes nearly $575 million of State and USDA Agricultural production research investment with over 88%, or $508 million, used for research considered neutral to both alternative and conventional farmers, while over $24 million of this was targeted to specific concerns of alternative or organic producers. All States were conducting research in the neutral area, but in 1982 five did not appear to have any in the special organic or alternative group. In the neutral category, regional distribution was 11% in the Northeast, 37% in the Southern, and 26% each for the North Central and Western groups. For the research of special interest to alternative farmers, 17% of the total was in the Northeast, 18% in the North Central, 34% in the Southern, and 31% in the Western region.

The Cooperative Extension System --CES-- staff at the State and county levels prepare pamphlets and articles for newspapers and magazines on alternative farming systems. They also have organized meetings and field day/demonstration activities on management alternative including: Small Farm Day at Highmoor Farm, Maine; Farming for the Future, California; Choices for the Future in Agriculture, Nebraska: Farming Systems Research and Extension Workshop, Kansas; Small Farm Newsletters, California; Establishing Realistic Yield Goals, Iowa; Low Input Agricultural Systems, New York; Alternative Farming Opportunities for the South; and Land and Water 2001--a cooperative effort by seven States, TVA and USDA.

ALTERNATIVE AGRICULTURE

Question: Professional farming journals are reporting an increasing interest in low-input farming techniques. Does more research in this area need to be conducted?

Answer: Yes, especially to test ideas and develop information on optional practices that are alternatives to conventional methods, which generally utilize purchased pesticides, fertilizers and petroleum. These off-farm inputs are high in cost compared with currently low agricultural commodity prices. Also, quantitative information is needed on crop yield trends, which generally show a real reduction following adoption of such alternative practices. The information must fill the need for determining functional and economic alternative agricultural production systems, which are specific to conditions of individual farmers. Increased efforts to develop these systems, utilizing recent advancements in genetics, nitrogen fixation, biological pest control, integrated pest management, crop sequence effects, conservation tillage, and other areas, should produce useful and much needed information on both technical and economic options for decision making by producers.

The issue of reducing production input costs is extremely complex and, as an example, includes options for minimum tillage of land for seeding crops. Although such practices usually reduce petroleum energy costs, there may be secondary effects of greater pest problems which must be resolved. Therefore, all management options need to be considered along with the risks associated with alternative decisions. It is in these interacting parts of the complex systems, and the use of new as well as time-proven technologies, where the pay-off from added research and development efforts should be excellent.

Question: How many low-input farms are currently in existence in the United States?

Answer: Virtually all farmers are practicing some form of low-input farming as they seek to reduce production costs and improve efficiency and profitability. However, the number of farms that have eliminated all or most use of manufactured chemical inputs is not known. There have been private surveys on numbers of "organic" farms, but we are not aware of surveys of farms where systematic substitutions of alternative practices have been integrated into a production systems approach, in contrast with conventional farming methods.

Question: Please clarify for the subcommittee (the meaning of) alternative farming methods by specifying the distinction between low-input or limited resource agriculture, sustainable agriculture, and organic agricultural methods.

Answer: Many terms have been used to designate agricultural production systems which are conceptual variations of practices often centering around purchased production inputs such as chemical pesticides, fertilizers, and petroleum. Terms such as organic or biological farming are generally considered as meaning those where off-farm chemical input is zero, except for those "acceptable" chemicals making up such off-farm purchased fertilizers and soil additives as sludges, manures, composts, lime, potash, some phosphates, sodium nitrate, guana, sea kelp, and certain other "naturally" occurring materials. Sustainable or regenerative agriculture is often considered to be all or mostly self contained on a given farming unit with a goal to maintain the productivity potential of soils. These terms have been used with essentially the same meaning as organic farming.

The term alternative agricultural production systems was used to describe the type of concerns to be addressed in Sections 1461 to 1471 of the 1985 Food Security Act. Generally, this term has been accepted more widely than organic, regenerative or sustainable, although there are some problems of clarity with the term alternative agricultural production systems as well.

A term used more recently by some is "low input." This is clear to those who consider the alternative systems to be used by farmers would involve reduced or "low" amounts of purchased inputs, such as chemical pesticides, fertilizers, and fuel. However, if reductions in amounts of weed chemicals in "low input" causes weed problems, the input of labor and mechanical control may need to be increased. The intent is to reduce overall costs of inputs, even though some individual inputs may increase.

A single term to appropriately describe the scope of what is intended may not be feasible. The intent is to describe "systems of farming," which will likely be different for each manager, to minimize use of purchased and other relatively high cost inputs while maintaining or improving the odds of making a profit. It is also emphasized that in describing the system and decision process, the "term" or "system" should clearly infer an incorporation of information about limits of use for environmentally hazardous chemicals to minimize chances of polluting soil and water resources.

Question: Please explain USDA's involvement in research projects in each of these areas.

Answer: For the purpose of this answer, the examples relate to agricultural productivity and are considered relevant to Subtitle C, Food Security Act of 1985. New thrusts in alternative systems include regional research projects in the Northeast and North Central regions which involve multi-state and State-Federal multi-agency efforts. Other related regional research and individual projects in many States have been underway for several years on questions such as: legumes in conservation tillage systems; nitrogen fixation by legumes; gains and losses of nitrogen in soils; manure management; sludge application on agricultural and forest lands and its impacts on quality of soil, water, food, and feed; fate of pesticides and other organic chemicals in soils; and crop sequence or rotation experiments. The Cooperative State Research Service --CSRS-- USDA is cooperating with North Carolina State University on a study to identify and classify types of publications on alternative systems for the dual purpose of assessing what is available and determining areas having few dependable reports and publications. This study relates directly to Section 1464, Subtitle C. A complementary study is nearing completion on scope, opportunities, and the status of relevant research in areas of alternative agriculture. This evaluation study, funded by USDA, was conducted by The Board on Agriculture of the National Academy of Sciences.

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Question: Is CSRS coordinating with other agencies of USDA to conduct more effective research and site monitoring of low-input farms?

Answer: There is good scientifically-based coordination of activities related to alternative farming systems and Subtitle C through a committee consisting of an ARS scientist, an ES specialist, and a reference librarian of the NAL working with a CSRS soil scientist as coordinator. Information exchange and cooperation with State Agricultural Experiment Stations occurs through Regional Research projects and existing and pending cooperative publications.

A goal of applied research is to obtain results which can be "extended" to specific problems and conditions of other agricultural producers. After several years of attempting to draw scientifically-based conclusions from monitoring studies of farms employing contrasting management options to conventional systems, researchers from both public and private organizations have generally concluded that few usable results were obtained. The primary cause is the high variability, which results in low precision of comparisons among farms. Measurements of yield and many other variables affecting yield can be made, but the influence of individual management decisions, the variability among soils, and differences in crop growing conditions make repeatability of results nearly impossible. However individual "case studies" can provide guidance for defining research needs, and such sources have been used in this way and will continue to be in the future. More effort is needed in publishing "how-to" publications on low input agriculture. Current publications emphasize more intensive farming practicies.

INTERNATIONAL TRADE CENTERS

Question: You were directed to prepare a report about Section 1419 of the Food Security Act of 1985 detailing the role of International Trade Development Centers. You have indicated to the committee that this report is being drafted and would be available by March 1, 1987. Have you forwarded that report to the committee?

Answer: A report detailing the role of the International Trade Development Centers has been drafted and is being reviewed by several agencies within the U.S. Department of Agriculture with international trade and marketing interest.

Question: If not, when will it be submitted?

Answer: The reviews should be completed and the final report submitted to Congress by April 1987.

FEDERAL ADMINISTRATION

Question: Please provide the Committee an explanation for the proposed decreases under the Federal Administration for the Gulf Coast Shrimp Aquaculture project; the Mississippi Valley State University grant; the funding for the Northern Marianas; as well as the Agriculture in the Classroom project.

Answer: The recently enacted Insular Areas Regulation Act of 1986, P.L. 99-396, allows Northern Marianas to receive funding under the Hatch Act, beginning in fiscal year 1987. Consequently, the funds previously provided to the Northern Marianas under direct Federal administration were not requested. Because of the Administration's overall reduction in Federal spending no funding is being requested for the Gulf Coast Shrimp Aquaculture, Mississippi Valley State University, and Agriculture in the Classroom projects.

Question: What is the status of each of these projects and why is no further funding proposed?

Answer: Funding will be provided to Northern Marianas under the Hatch Act in 1987. The fiscal year 1987 grants for the Gulf Coast Shrimp Aquaculture project have been awarded to the Oceanic Institute, Hawaii, and the Gulf Coast Research Laboratory, Mississippi, to continue a research program to further develop an economically viable commercial marine shrimp culture industry in the United States. The fiscal year 1987 grant to Mississippi Valley State University for curriculum development and strengthening has been awarded. Funds have been provided in 1987 to the USDA Agriculture in the Classroom program. The program provides basic knowledge about agriculture to school students from the kindergarten level through high school. To assist in deficit reduction efforts, no funding is proposed for these projects under direct Federal administration.

Question: Also, you request increases under Federal administration for the Office of Agricultural Biotechnology, peer panels, and the Office of Grants and Program Systems. Please explain these requests in detail, are these new programs and, if so, what is their duration and purpose?

Answer: The requested increases under direct Federal administration for the Office of Agricultural Biotechnology, peer panels, and the Office of Grants and Program Systems are necessary for CSRS to adequately administer its programs. Except for the Office of Agricultural Biotechnology, these direct Federal Administration proposals represent direct funding for ongoing activities previously funded from other sources. At this time, CSRS sees these requests as being needed for an indefinite duration.

The U. S. Department of Agriculture --USDA-- recognizes that the science of biotechnology holds great promise for improving the quality and availability of our food and fiber supplies, maintaining our position in the international marketplace, and enhancing our natural resources. In order to assure program coordination and operational efficiency, the Office of Agricultural Biotechnology was established in July 1986. In 1987 the Office of Agricultural Biotechnology is being financed on a reimbursable basis. It is the policy of USDA to encourage and support responsible development and utilization of beneficial products and the environment. The establishment of the Office of Agricultural Biotechnology is deemed to be in the best interest of the public and USDA. The Office will have primary responsibility for coordinating the Department's policies and procedures pertaining to all facets of agricultural biotechnology.

The Office of Grants and Program Systems --OGPS-- administers programs of competitive grants for research in the food and agricultural sciences, programs in higher education and the Small Business Innovation Research Program. This agency also provides management support services to the Joint Council, Users Advisory Board, and to other agencies for the administration of various agricultural research grants. To support the operating costs of OGPS, a permanent transfer in the estimates of $680,000 is now being proposed including $430,000 from Agricultural Research Service, $240,000 from Extension Service and $10,000 from National Agricultural Library. Funding for OGPS activities has also been provided by the Cooperative State Research Service --CSRS-- which also administers extramural agricultural research programs involving many of the same participants. In the past, the other Science and Education agencies have also contributed funds annually on a reimbursable basis to support the operating costs of OGPS. In order to streamline the organizational structure of the Department and to consolidate the nationwide system of agricultural research program planning and coordination among the Department of Agriculture, the state institutions, and the agricultural industry, a reorganization has occurred which transfers all authorities, responsibilities and activities of OGPS to CSRS.

The Technical Advisory Committee for Science and Education Research Grants Programs was established in order to advise the Secretary of Agriculture on the relative technical and scientific merits of research grant applications submitted to Science and Education of the U.S. Department of Agriculture. The Committee consists of scientists who are recognized by their peers as experts in the areas of agricultural research included under the Science and Education Grants Programs. Committee members evaluate research proposals and recommend proposals that should be selected for research grants awards. Section 1409(c) of the National Agricultural Research, Extension, and Teaching Policy Act Amendments of 1985 (1985 Farm Bill) states "The Federal Advisory Committee Act (5 U.S.C. App. 2) and Title XVIII of the Food and Agriculture Act of 1977 (7 U.S.C. 2281 et seq.) shall not apply to a panel or board created for the purpose of reviewing applications or proposals submitted under this section." Consequently, the Technical Advisory Committee will no longer function as a formal advisory committee under the Department's Advisory Committee account and it will be terminated as such. Cooperative State Research Service will continue to use the peer panel review process to evaluate the Competitive Research Grants program, the Higher Education program and the Small Business Innovation Research program. This request reflects the cost of travel and honorarium for the peer panel members.

POTATO RESEARCH

Question: Would you please provide for the committee for fiscal years 1986, 1987 and proposed for fiscal year 1988, the amount of potato research by location and funding level.

Answer: The most recent data available from the Current Research Information System on CSRS funding for potato research by location is for fiscal year 1985 and we will provide this information.

Cooperative State Research Service
Fiscal Year 1985

POTATO RESEARCH

State/Location	FY 1985 Funding Levels
ALABAMA: Auburn University	$22,443
ARIZONA: University of Arizona	4,528
CALIFORNIA: University of California, Berkeley	51,001
COLORADO: Colorado State University	101,884
CONNECTICUT: University of Connecticut	14,017
DELAWARE: University of Delaware	48,903
FLORIDA: University of Florida	1,910
GEORGIA: University of Georgia	101
Fort Valley State College	4,122
GUAM: University of Guam	42,800
IDAHO: University of Idaho	211,999
INDIANA: Purdue University	35,585
IOWA: Iowa State University	6,457
KANSAS: Kansas State University	9,233
KENTUCKY: University of Kentucky	7,744
LOUISIANA: Louisiana State University	24,011
MAINE: University of Maine	537,730
MARYLAND: University of Maryland	46,758
MASSACHUSETTS: University of Massachusetts	78,217
MICHIGAN: Michigan State University	352,419
MINNESOTA: University of Minnesota	112,094
MISSISSIPPI: Mississippi State University	1,869
MISSOURI: University of Missouri	10,445
NEBRASKA: University of Nebraska	23,715
NEVADA: University of Nevada	951
NEW YORK: Cornell University	301,471
Geneva Agricultural Experiment Station	1,302
NEW JERSEY: Rutgers University	76,651
NORTH CAROLINA: North Carolina State University	42,983
North Carolina A&T State University	42,146
NORTH DAKOTA: North Dakota State University	143,898
OHIO: Ohio Agricultural Research & Development Center	82,248
OREGON: Oregon State University	108,453
PENNSYLVANIA: Pennsylvania State University	174,427

PUERTO RICO:	University of Puerto Rico	14,150
RHODE ISLAND:	University of Rhode Island	82,219
SOUTH DAKOTA:	South Dakota State University	8,758
TEXAS:	Texas A&M University	18,702
	Texas A&M Research Foundation	39,000
VERMONT:	University of Vermont	3,445
VIRGINIA:	Virginia Polytechnic Institute and State University	83,476
WASHINGTON:	Washington State University	114,110
WEST VIRGINIA:	West Virginia University	126,027
WISCONSIN:	University of Wisconsin	502,917
WYOMING:	University of Wyoming	16,490
	Total	3,733,806

AQUACULTURE RESEARCH

Question: In fiscal year 1987, special grants funding for aquaculture research was increased by $200,000 above the fiscal year 1986 level of $285,000. Please inform the Committee of the location and the status of these ongoing aquaculture research projects.

Answer: In fiscal year 1987, $285,000 will be awarded on a competitive basis as announced in the Federal Register on November 21, 1986. Recommendations for funding will be made by a peer panel with a maximum total per grant of $80,000. Ongoing research supported by this program for grant awards in previous fiscal years is being conducted in Alabama, California, Georgia, Indiana, Mississippi, Oklahoma, Oregon, Texas, and Washington.

In fiscal year 1987, the $200,000 increase in funding was earmarked by Congress for Louisiana State University. This grant has been awarded for studies on the commercial culture of crawfish and redfish in Louisiana.

AQUACULTURE RESEARCH - SALMON

Question: The University of California received a grant award to conduct research on salmon. Would you please explain the value of this research in relation to the growing importance of aquaculture research?

Answer: There are three activities in salmonid aquaculture supported by CSRS grants. These projects are in the area of genetics, disease, and broodstock nutrition. These projects have contributed to the development of the aquaculture industry. This research has led to improved egg quality and egg availability for rainbow trout, and has led to reduced post spawning losses of broodstock. Research on proliferative kidney disease --PKD-- will improve disease identification and develop techniques to prevent transmission of the disease. PKD represents a serious threat to many salmonid stocks. Research in the area of salmonid genetics has contributed to the development of improved broodstocks for the industry. These projects have contributed to important advances in aquaculture with regional and national application.

AQUACULTURE RESEARCH - CATFISH

Question: Over the past three fiscal years, aquaculture research conducted at Stoneville, Mississippi, has been proposed for termination. Studies under this research involve feeding programs and water quality factors affecting commercial catfish production. Have any new areas of research been proposed in aquaculture research relating to improved catfish production?

Answer: Yes, several new areas of research relating to the catfish industry are being addressed in the ongoing and proposed research at Stoneville, Mississippi. Off-flavor in channel catfish production continues to be a major problem for the industry. Innovative research under this program has led to improved methods for detection of off-flavor compounds in fish tissue and in pond water samples. Studies have indicated that methyl isoborneal is one of the primary compounds responsible for off-flavor in catfish and that its presence in ponds is related to levels of certain algae in ponds. Ongoing studies are investigating possible chemical and biological controls for off-flavor. Research has also focused on new approaches to broodstock management and production strategies. Proposed research for fiscal year 1987 will address nutritional requirements of intermediate to harvestable size fish. This research could lead to significant reduction in production cost. In general, this research program is addressing new areas of research that are important to the rapidly expanding industry.

SPECIAL RESEARCH GRANTS

AQUACULTURE CENTERS

Question: In fiscal year 1987, $3 million was appropriated for the establishment of regional aquaculture centers. How many centers have been established and in what locations?

Answer: Four centers have been designated. The centers are located at Southeast Massachusetts University, Mississippi State University, The University of Washington, and one under joint management between The Oceanic Institute and The University of Hawaii.

Question: Do you expect that completion of these centers can be accomplished without additional funding in fiscal year 1988?

Answer: Operational procedures and cooperative relationships are being developed and we anticipate that the centers will be operational in the very near future. Proposed increases in Hatch Act formula funds would be available to continue these programs in 1988.

Question: What is the extent of research projects expected to be carried out at these centers?

Answer: Although the specific priorities will be established at each regional center, we hold that the principles of mission-oriented research and extension activities, guided by strong private sector input, will give direction to the scope of the research and development activities.

RANGELAND RESEARCH

Question: How many grants for Rangeland Research are currently funded?

Answer: There were six grants awarded in fiscal year 1986 in the Rangeland Research program. These were chosen based on merit from the 82 proposals submitted. The fiscal year 1987 grants have not yet been awarded.

Question: In what parts of the country are these projects located?

Answer: The fiscal year 1986 grants were awarded to researchers in Arizona, California, Texas and Utah.

Question: What is the status of these projects?

Answer: Each of these projects is in the first year of a multi-year grant. The programs are just being initiated for this growing season on the range.

CRITICAL MATERIALS ACT

Question: In the last fiscal year, the Congress appropriated $20 million for critical agricultural materials research and construction. A portion of this funding was for the construction of new facilities at the University of Southern Mississippi. Would you please tell us the status of this construction project?

Answer: The Polymer Research Institute at the University of Southern Mississippi was awarded a planning grant --$476,000-- in fiscal year 1985 and a facilities grant --$9,700,000-- in fiscal year 1987. Planning has proceeded well and the programs and facility concept are developing. The University has selected a site, approved preliminary plans and they are now in final stages of the architectural and engineering design.

Question. Please summarize for us the range of research grant awards in critical materials that are ongoing. For the hearing record, it would be useful to receive a progress report on the various research efforts in critical materials.

Answer: Research funded under the Critical Agricultural Materials Act is to develop a natural, domestic rubber industry using the desert shrub guayule as a source of rubber. Ongoing research is designed to increase the productivity --per-acre yield-- of rubber by developing fast growing, higher yielding shrubs with increased concentrations of rubber. Procedures being used are traditional plant breeding and selection techniques along with some basic genetic and interspecific crossing studies. Management research is looking at harvesting one or more crops before reseeding --pollarding-- seed production and seeding establishment, irrigation, harvesting, handling and storage, and pest control. Post-harvest technology is investigating extractable rubber yield, biological and environmental parameters impacting rubber yield and rubber quality. The fiscal year 1986 grant recipients are conducting research in the following programs:

Funding Level by Program and State

Program	Arizona	Calif.	N. Mexico	Texas	Total
Plant breeding and selection	$55,479	$176,196	--	--	$231,675
Regional trials,	17,085	17,086	$17,086	$17,086	68,343
seed increase	10,290	9,968	10,290	--	30,548
Management and agronomics	--	--	25,148	141,350	166,498
Post harvest processing	--	--	--	94,916	94,916
Mechanization	14,356	--	--	--	14,356
Plant Pathology	33,524	--	--	--	33,524
Total	130,734	203,250	52,524	253,352	639,860

Progress is being made in all of these technologies with marginal improvements in both products, such as higher yielding varieties, and in knowledge, such as a growing cadre of human resources with guayule rubber expertise in the many facets of the technology. The rate of progress will be largely determined by the number of minds dedicated to solving the problems. The research objectives are still being met and the ultimate goal of commercialization is closer but still some distance away.

DRIED BEAN RESEARCH, NORTH DAKOTA

Question: In fiscal year 1987, the appropriations for Dried Bean Research in North Dakota was increased by $27,000 over the $48,000 provided in fiscal year 1986. Would you please discuss the status of this program and whether its maximum advantage will be achieved if termination of the project is accomplished by the end of this fiscal year?

Answer: The production of edible dry beans in North Dakota has increased several fold during the past decade, both acreage-wise and yield per acre. This has been the direct result of the development of new high yielding, high quality, insect and disease resistant varieties such as Pindak, Holberg, and Nordak pinto beans, released in 1981, 1983 and 1984, respectively. These varieties were developed, in part, with Special Research Grants funds. In 1986 North Dakota was the leading state in the production of edible dry beans. According to a North Dakota Agricultural Experiment Station publication, the production of dry beans in North Dakota is expected to continue to increase as new and better adapted, insect and disease resistant, high quality protein varieties are developed from the edible dry bean breeding program at North Dakota. Although funds have not been requested for this special research grant, research can continue to be conducted using Hatch and State funds.

MINOR USES OF PESTICIDES AND ANIMAL DRUGS

Question: Safety in the use of pesticides and animal drugs by farmers is a key environmental and health priority. Please explain the progress of research accomplished by CSRS in the use of pesticides on minor crops and animal drugs for specific species where little or no information might otherwise be available.

Answer: The program provides the national leadership, coordination and focal point for obtaining tolerance and residue safety data for pesticides and biological control agents in horticultural crops and for minor use drugs in animals. The need arose because the agricultural chemical and drug industries cannot economically justify the time and expense to conduct the necessary research for pesticides and drugs with small market potential. With the Federal registrations resulting from this research, a large number of small-acreage crops such as vegetables, fruits, nuts, spices and other specialized crops have been provided with needed crop protection against pests. Similarly, the lack of effective and legal drugs for the control of animal disease both reduces the availability of animal products and increases costs to the consumer. During the past five years, 402 food tolerances, 1,087 ornamental labels and seven drug approvals have been completed. To date 220 different species of food crops, 650 species of ornamental plants and twelve species of animals have been utilized in these studies. These include such minor species as pigeon peas, kiwifruit, artichoke, pheasants, and lobster as well as more common species as cabbage, turnip, rhubarb, catfish and rabbits.

Question: How many field and residue studies have been conducted?

Answer: During the period 1982 through 1986, 1,535 field projects, 1,032 laboratory residue analysis studies, 3,073 ornamental studies and 28 animal investigations were conducted. In 1986 alone, 307 field, 196 residue, 375 ornamental and 16 drug studies were under investigation.

Question: At what research center(s) is this research performed?

Answer: Field work is performed at the State Agricultural Experiment Stations and Federal labs. Over the period 1982 through 1986, the program experienced 100 percent participation in various research projects by these stations. In 1986, 87 percent of the stations participated in the research projects. Laboratory analysis is conducted primarily at the California, New York, Florida, and Michigan Agricultural Experiment Stations with assistance by the Oregon, Utah, Hawaii, Arizona, Ohio, North Dakota, Arkansas, North Carolina, Virginia, Massachusetts, Pennsylvania, and New Jersey Agricultural Experiment Stations. Data assimilation and registration processing is coordinated through the New Jersey Agricultural Experiment Station.

Question: What has been the funding request as compared to appropriations in this area over the past five years?

Answer: The information follows.

PESTICIDE CLEARANCE AND MINOR USE ANIMAL DRUGS
(dollars in thousands)

Fiscal Year	Budget Request	Appropriation
1987	- -	$1,598
1986	- -	1,598
1985	$1,680	1,680
1984	1,680	1,680
1983	1,680	1,680

SELECTED SPECIAL RESEARCH GRANT PROJECTS

Question: Beginning in fiscal year 1987, six new special research grant projects were funded. These projects include research on:

1) Dark-end syndrome of potatoes;
2) Multi-cropping strategies for aquaculture;
3) Prime farmland reclamation;
4) Belgium Endive;
5) Remote sensing; and
6) Acid precipitation.

Would you please tell the committee what the current status of each of these projects is and, whether or not they have met their full research objectives?

Answer: Dark-End Syndrome of Potatoes. Fiscal year 1987 is the first year of funding for Dark-end Syndrome of potatoes research using Special Research Grant funds. The research, to be conducted cooperatively by the Idaho, Oregon, and Washington State Agricultural Experiment Stations will determine the physiological and biochemical factors which sometimes cause the ends of french fried potatoes produced from tubers grown under high temperature and/or low moisture stress conditions to turn dark and shrivel. Potato clones from the USDA/ARS Western Regional Variety Improvement Program will be evaluated for resistance to dark-end (sugar-end) development during the critical periods of growth. The research proposals have been requested but since the grants have not yet been awarded, no results are available on the research objective.

Multi-cropping Strategies for Aquaculture. The multi-cropping strategies for aquaculture project is presently undergoing peer review and has not been initiated. The objective of the proposed research is to develop design criteria for the coproduction of shrimp and oysters in aquacultural systems. Since this research has not been initiated, progress toward meeting objectives cannot be evaluated at this time.

Prime Farmland Reclamation. The research proposals have been requested but since the grants have not been awarded, no results are available on the research objectives. These research projects on prime farmland reclamation research are planned to supplement current information for the development of technology to assure successful reclamation of the mined land. Focus will be on methods for inferring relative productivity of post-mine-constructed soils based on chemical and physical measurements of properties of the premined site. Comparisons will be made among reconstruction methods, with tillage and other soil and crop management variables compared in crop production systems. Changes in physical and chemical characteristics of the reconstructed land will be evaluated as soil development occurs and related to potential productivity of the reconstructed site.

Belgium Endive. Fiscal year 1987 is the first year of funding for Belgium endive using Special Research Grants funds. This research will be done by the Massachusetts State Agricultural Experiment Station, with input and cooperation from the Connecticut State Agricultural Experiment Station at New Haven. These studies will be conducted to evaluate Belgium endive varieties grown on western Massachusetts soil types, using various plant spacings, dates of planting, nitrogen nutrition, and weed control to obtain the optimum yield of quality. The research proposals have been requested but since the grant has not yet been awarded, no results are available on the research objectives.

Remote Sensing. With funds appropriated in fiscal year 1985, the University of Kansas Applied Remote Sensing Program began a program of basic and applied research directed toward enhancement of the manner in which remote sensing and related technology, such as automated geographic information systems can be employed to help address important agricultural issues. The University of Kansas and several other universities have formed the Center for Advanced Land Management Information Technology -- CALMIT. This inter-university consortium is designed to facilitate research on remote sensing, geographic information systems, automated cartography and related technology. Through CALMIT resources and data will be shared, and joint projects developed. A Special Grant of $191,000 appropriated in fiscal year 1987 continues this work in Kansas. We have solicited a proposal from the University of Kansas and Kansas State University to carry out the intent of Congress in this appropriation. We expect to receive such a proposal and process it in the immediate future.

Acid Precipitation. Fiscal year 1987 Special Research Grant funds are being awarded through a competitive process. The announcement of availability of funds was made by CSRS on December 30, 1986. This funding mechanism permits the focusing of research and coordination among funded research projects in areas of greatest need, consistent with priorities jointly established by federal and state science leaders. This grant program emphasizes research on deposition effects and exposure dynamics in specific crops and cropping systems. Proposals are being considered in the following priority areas:

1. Growth and yield responses of various crop species and cultivars within species to acid precipitation.

2. Interactive effects of acid precipitation, gaseous air pollutants, drought, and plant pests and pathogens on crop growth and yield.

3. Mechanisms by which the above atmospheric components and environmental and biotic stresses alone or interacting influence the growth, development and yield of agricultural crops.

4. Exposure dynamics of selected plant species or ecosystems in relation to known ambient atmospheric depositions, including acidic precipitation precursors, on a local or regional scale.

Research proposals have been received, but since grants have not yet been awarded, no results are available on the research objectives. In all cases, funds may be used over a five-year period to complete the research.

Question: Should these programs be discontinued?

Answer: In line with our priorities and the Administration's overall reductions in Federal spending, CSRS has proposed that all Special Research Grants, including these six new programs, should be discontinued.

Question: Why?

Answer: Due to the discretionary nature of the Hatch Act formula and related base funded programs, amounts allotted to State institutions permit the institutions to fund research in those areas that they identify as high priority. This flexibility could provide for maintaining some of these Special Research Grant programs, if the State institutions wish to continue the research. Increases are proposed for Hatch and other basic formula programs.

AGRICULTURAL POLICY INSTITUTE (IOWA AND MISSOURI)

Question: Please inform the committee about the activities of the Agricultural Policy Institute in Iowa and Missouri during the past fiscal year.

Answer: The Food and Agricultural Policy Research Institute --FAPRI-- was established by the University of Missouri-Columbia and Iowa State University in 1984. It is a unique, dual-university research institute that conducts research and analysis on U.S. food, agricultural, and trade policies. FAPRI was made possible by the support of the two universities and a special research grant administered by CSRS, USDA. FAPRI has made a contribution to the debate on the 1985 farm legislation by conducting, and widely disseminating, comprehensive analyses of policy alternatives and the implications of those alternatives for U.S. agriculture and international agricultural markets.

The research is being conducted at the Food and Agriculture Policy Institute at the University of Missouri and the Center for

Trade and Agricultural Policy at Iowa State University. The University of Missouri is focusing on U.S. domestic farm and food policies and their domestic impacts. Iowa State University is focusing on the economic interrelationships between domestic and foreign food and agricultural industries and evaluating factors in the U.S. and abroad that influence trade prospects and patterns.

During the past fiscal year, FAPRI published a number of reports comparing a wide range of agricultural policy options, from a free market to mandatory supply controls at 80 percent parity prices. Also, FAPRI evaluated the Administration's proposal, and provided the first analysis of the new marketing loan program concept.

As the agricultural policy debate converged on farm financial problems, FAPRI conducted a comprehensive analysis of the interrelationship between the choices of commodity and farm financial programs and the consequences of these choices for agricultural and financial markets. After the Food Security Act became law in December 1985, FAPRI conducted a comprehensive analysis of the consequences of the Act for U.S. agricultural and international agricultural trade.

SELECTED SPECIAL RESEARCH GRANT PROJECTS

(GENERAL)

Question: Would you please provide the Committee with a table of the current Special Research Grant projects and, for each project, the location site, the purpose, and the status of each project in meeting stated objectives.

Answer: The information follows:

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: SOIL EROSION-PACIFIC NW
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Agricultural Expt. Stn. Univ. of Idaho Moscow, ID 83843	Edgar L. Michalson	86-CRSR-2-2807 8602640	$186,756	06/01/86 05/31/88	Soil Erosion in the Pacific Northwest (STEEP Program) Idaho	SAES
Oregon State Univ. Corvallis, OR 97331	Larry Boersma	85-CRSR-2-2610 8603056	$186,756	07/01/85 06/30/89	Soil Erosion Control in Pacific Northwest (STEEP Program) - Oregon	SAES
Washington State Univ. Pullman, WA 99164	Dennis Oldenstadt	85-CRSR-2-2557 8602286	$186,756	04/01/85 05/31/89	Soil Erosion Control in Pacific Northwest (STEEP) Washington	SAES

TOTAL $560,268

PROGRAM AREA: DRIED BEAN RESEARCH, ND

Agricultural Expt. Stn. North Dakota State Univ. Fargo, ND 58105	K. F. Grafton	84-CRSR-2-2358 8601325	$45,504	07/01/84 06/30/87	Improvement of Edible Dry Beans	SAES

TOTAL $45,504

PROGRAM AREA: FOOD SYSTEMS RESEARCH GROUP, WI

Univ. of Wisconsin Madison, WI 53706	Bruce W. Marion	86-CRSR-2-2903 8602343	$140,304	08/15/86 10/31/89	The Organization, Regulation, and Performance of the U.S. Food System	SAES

TOTAL $140,304

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: INTERGRATED PEST MANAGEMENT
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Arkansas Fayetteville, AR 72701	J. M. Stewart	86-CRSR-2-2879 8603118	$70,257	09/01/86 09/30/88	Cotton Germplasm Resistance to Early Season Biotic Attack	SAES
Univ. of Arizona Tucson, AZ 85721	L. Irene Terry	86-CRSR-2-2927 8603153	$24,250	09/01/86 08/31/87	Compatibility Between Western Flower Thrips Cips Control and Pollination Practices in Apple Orchards	SAES
Univ. of California Berkeley, CA 94720	Joseph G. Hancock	86-CRSR-2-2951 8603228	$30,000	09/15/86 09/30/87	Chronic Stresses and Yield Impacts on Forage Alfalfa by Pathogens of Roots	Land Grant-1862
Univ. of California Berkeley, CA 94720	Milton N. Schroth	86-CRSR-2-2954 8603236	$19,500	09/15/86 09/30/87	Fungal-Bacterial Nematode Disease Complex of Potato Tubers in Semi-Arid Agroecosystems	SAES
Univ. of California Berkeley, CA 94720	Steven E. Lindow	86-CRSR-2-2950 8603237	$30,000	09/15/86 09/30/87	Management and Mechanisms of Copper Tolerance Among Bacteria on Tree Fruits	SAES
Univ. of California Davis, CA 95616	Becky Westerdahl	86-CRSR-2-2957 8603239	$29,500	09/15/86 09/30/87	Integrated Use of Microbial and Chemical Nematicides for Potatoes in Tulelake	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: INTERGRATED PEST MANAGEMENT
PUBLIC LAW 89-106
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of California Davis, CA 95616	David Viglierchio	85-CRSR-2-2727 8603231	$14,000	09/15/85 09/30/87	Behavior Modification of Tree Fruit Nematode Pests from Subnematicidal Stress	Land Grant-1862
Univ. of California Davis, CA 95616	Robert F. Norris	85-CRSR-2-2728 8603246	$24,500	09/15/85 11/30/87	Impacts of Winter Annual and Summer Grass Weeds on Decline of Irrigated Established Alfalfa Stands	SAES
Univ. of California Davis, CA 95616	Bryce W. Falk	86-CRSR-2-2935 8603150	$48,500	09/01/86 08/31/87	The Etiology and Ecology of Barley Yellow Dwarf Virus in California Cereals	SAES
Univ. of California Davis, CA 95616	Frank G. Zalom	85-CRSR-2-2725 8603169	$18,200	09/15/85 09/30/87	Developing and Extending Decision Support System Software for Tree Fruit	SAES
Colorado State Univ. Fort Collins, CO 80523	John L. Capinera	85-CRSR-2-2637 8603148	$32,200	07/01/85 11/30/87	Determination of Economic Impact for Brush and Insect Pests of Sagebrush Ecosystems	SAES
Colorado State Univ. Fort Collins, CO 80523	Gary A. McIntyre	86-CRSR-2-2937 8603175	$34,285	09/15/86 09/30/87	Western Regional Integrated Pest Management Special Projects Program	Land Grant-1862

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: INTERGRATED PEST MANAGEMENT
PUBLIC LAW 89-106
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Colorado State Univ. Fort Collins, CO 80523	Harold Larsen, Jr.	86-CRSR-2-2955 8603230	$12,500	19/15/86 09/30/87	Nematode Colonization of Fumigated Orchard Soils from Adjacent Plant Root Zones	Land Grant-1862
Univ. of Florida Gainesville, FL 32611	D. W. Dickson	86-CRSR-2-2885 8603132	$60,000	09/01/86 08/31/88	Effects of a Polyspecific Nematode Community on Soybean	Land Grant-1862
Iowa Agriculture & Home Economics Expt. Stn. Ames, IA 50011	Harold Stockdale	86-CRSR-2-2782 8602367	$15,000	07/01/86 06/30/88	A Degree Day Model for the European Corn Borer	SAES
Univ. of Idaho Moscow, ID 83843	James R. Davis	86-CRSR-2-2958 8603233	$20,000	09/15/86 09/30/87	The Etiology of Premature Death of Potato: The Role of *Colletotrichum coccodes*	SAES
Univ. of Idaho Moscow, ID 83843	Guy W.Bishop	86-CRSR-2-2930 8603166	$10,500	09/01/86 08/31/87	Relationship of Late Season Green Peach Aphid Populations to Spread of Potato Leafroll Virus and Occurrence of Tuber Net Necrosis	SAES
Univ. of Idaho Moscow, ID 83843	Guy W. Bishop	85-CRSR-2-2708 8603229	$14,500	07/01/85 06/30/88	Relationship of Aphid Vectors to Barley Yellow Dwarf Spread in Cereal	SAES

SPECIAL RESEARCH GRANTS PROGRAM
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Illinois Urbana, IL 61801	William G. Ruesink	86-CRSR-2-2786 8602359	$50,000	06/01/86 05/31/87	Analysis of Soybean Production/Protection Systems and Research Needs in the North Central Region	Land Grant-1862
Purdue Research Foundation West Lafayette, IN 47907	Ralph L. Nicholson	86-CRSR-2-2785 8602360	$60,000	07/01/86 06/30/88	Development of Improved Methods for Protecting Corn From Anthracnose	SAES
Purdue Research Foundation West Lafayette, IN 47907	Marlin K. Bergman	86-CRSR-2-2803 8601006	$60,000	06/01/86 05/31/88	Interfield Movement of Western Corn Rootworm Adults with References to Area-Wide Management	SAES
Kansas State Univ. Manhattan, KS 66506	N. V Anderson	86-CRSR-2-2787 8602345	$73,520	05/15/86 05/31/87	Integrated Health Management Program for Confined Swine	Vet School/College
Univ. of Kentucky Res. Fdn. Lexington, KY 40506-0057	B. A. Thielges	86-CRSR-2-2900 8603131	$42,000	08/15/86 08/30/88	Micoevolutionary Processes and Selection Pressures in Natural and Manipulated Pathosystems	SAES
Univ. of Kentucky Res. Fdn. Lexington, KY 40506-0057	Fred W. Knapp	86-CRSR-2-2881 8603127	$60,000	09/01/86 02/28/89	Utilizing Physiological Parameters to Determine Economic Injury Levels of Horn and Stable Fly on Cattle	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: INTERGRATED PEST MANAGEMENT
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Louisiana Agricultural Expt. Stn. Baton Rouge, LA 70893	Kenneth S. Derrick	86-CRSR-2-2894 8603135	$70,000	08/15/86 08/31/88	Causes and Control of Delayed Maturity of Soybeans	SAES
Louisiana Agricultural Expt. Stn. Baton Rouge, LA 70893	Lane D. Foil	86-CRSR-2-2906 8603136	$60,000	09/01/86 08/31/88	Establishing Feasibility of Horse Fly and Deer Fly IPM When Livestock are Surrounded by Tabanid Larval Habitats	SAES
Louisiana State Univ. & A&M College Baton Rouge, LA 70803	D. J. Boethel	86-CRSR-2-2886 8603129	$66,000	09/01/86 08/31/88	Soybean Growth & Development: Response to Stress by an Insect-Disease-Nematode Complex	SAES
Univ. of Massachusetts Amherst, MA 01003	Stephen J. Herbert	86-CRSR-2-2779 8602373	$19,390	05/15/86 05/31/87	Crop Management Interactions with Fusarium Crown and Root Rot: Effects on Yield and Stand Persistence	Land Grant-1862
Univ. of Massachusetts Amherst, MA 01003	David N. Ferro	86-CRSR-2-2788 8602355	$11,000	06/01/86 05/31/87	Colorado Potato Beetle Temperature-dependent Growth and Feeding Model	SAES
Univ. of Massachusetts Amherst, MA 01003	Ronald J. Prokopy	85-CRSR-2-2709 8602211	$30,000	07/01/85 01/31/89	Behavioral Management of Apple Maggot Flies	SAES

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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Maryland College Park, MD 20742	W. O. Lamp	86-CRSR-2-2860 8603055	$19,390	08/01/86 01/31/88	The Effect of Potassium Applications on Pest Management Decisions in Alfalfa	SAES
Univ. of Maine Orono, ME 04469	A. Randall Alford	86-CRSR-2-2759 8602214	$10,000	04/15/86 04/30/87	Effects of Limonin and Related Compounds on Colorado Potato Beetle Larvae	SAES
Univ. of Maine Orono, ME 04469	Stellos Tavantzis	86-CRSR-2-2767 8602219	$14,000	05/01/86 04/30/87	Biological Control of Rhizoctonia solani by Cytoplasmic Hypovirulence	SAES
Michigan State Univ. East Lansing, MI 48824	Edward J. Grafius	85-CRSR-2-2644 8602361	$60,000	06/01/85 05/31/88	Management of Insecticide Resistance in the Colorado Potato Beetle	SAES
Michigan State Univ. East Lansing, MI 48824	G. W. Bird	85-CRSR-2-2642 8602362	$29,722	07/1/85 06/30/88	Three Models for Predicticting Potato Plant Growth and Tuber Yield North Central Potato Systems	Land Grant-1862
Univ. of Minnesota St. Paul, MN 55104	Paul S. Teng	85-CRSR-2-2679 8602386	$30,663	06/01/85 05/31/88	Evaluation of Three Potato Crop-Pest Models	SAES

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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Minnesota St. Paul, MN 55104	Richard J. Sauer	84-CRSR-2-2515 8603119	$201,396	09/15/84 09/30/88	Research Grants for North Central Experiment Station Region	SAES
Mississippi Agricultural and Forestry Experiment Stn Mississippi State, MS 39762	F. M. Bourland	86-CRSR-2-2887 8603117	$33,800	09/1/86 03/31/89	Determination of Optimum Utilization of Resistance to Heliothis spp. in Advanced Cotton Germplasms	SAES
Montana State Univ. Bozeman, MT 59717	Thomas W. Carroll	85-CRSR-2-2645 8603172	$25,000	06/01/85/ 08/31/75	Barley Yellow Dwarf Virus Isolates Vectored by Corn Leaf Aphids	SAES
North Carolina Agricultural Research Service Raleigh, NC 7695	G. G. Wilkerson	86-CRSR-2-2888 8603128	$50,000	09/01/86 08/31/88	Improved Heliothis Management in Southeastern Soybeans	SAES
North Carolina Agricultural Research Service Raleigh, NC 27695	Richard C. Axtell	86-CRSR-2-2889 8603126	$51,600	09/01/86 08/31/88	Pest Management in Confined Livestock and Poultry Production Systems	SAES
Agricultural Expt. Stn. Fargo, ND 58105	Donald C. Nelson	85-CRSR-2-2712 8602364	$16,273	07/01/85 06/30/88	Evaluation of Three Models for Predicting Potato Plant Growth and Tuber Yield	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: INTERGRATED PEST MANAGEMENT
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Agricultural Experiment Station Fargo, ND 58105	Neil C. Gudmestad	86-CRSR-2-2776 8602365	$60,000	07/01/86 06/30/88	The Survival and Persistence of Potato Ring Rot in Alternate Hosts	SAES
Agricultural Expt. Stn. Fargo, ND 58105	Arland E. Oleson	86-CRSR-2-2784 8602366	$60,000	07/01/86 06/30/88	Development of a DNA Hybridization Assay for Detection of the Ring Rot Pathogen	SAES
New Hampshire Agric. Expt. Stn. Durham, NH 03824	William MacHardy	85-CRSR-2-2694 8602212	$28,575	06/01/85 12/31/88	A Strategy for Delaying Early Scab Sprays Based on Inoculum Dose	SAES
Agricultural Experiment Station New Brunswick, NJ 08903	James H. Lashomb	86-CRSR-2-2773 8602358	$12,000	05/15/86 05/31/87	Parasitic Activity and Attack Behavior of *Edovum puttleri* Reared from Two *Leptinotarsa* Hosts	SAES
New Mexico State Univ. Las Cruces, NM 88003	Kirk C. McDaniel	85-CRSR-2-2711 8603165	$34,600	08/01/85 07/31/88	Integrated Pest and Agroecosystem Management for Sagebrush Rangelands in the Colorado Plateau	SAES
New Mexico State Univ. Las Cruces, NM 88003	John J. Ellington	86-CRSR-2-2933 8603170	$19,000	09/01/86 08/31/87	Predator Efficacy in Alfalfa Ecosystems	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: INTERGRANTED PEST MANAGEMENT
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
New Mexico State Univ. Las Cruces, NM 88003	Bill Melton	86-CRSR-2-2931 8603167	$15,500	09/01/86 08/31/87	Multiple-Strain Crosses in Alfalfa as a Procedure to Incorporate Multiple-Pest Resistance into Alfalfa Cultivars	SAES
New Mexico State Univ. Las Cruces, NM 88003	Cliff G. Currier	86-CRSR-2-2932 8603168	$14,500	09/01/86 08/31/87	Inheritance and Correlated Selection Responses for Resistance to the Blue Alfalfa Aphid	SAES
Univ. of Nevada Reno, NV 89512	Robin J. Tausch	86-CRSR-2-2928 8603151	$21,000	09/01/86 08/31/87	Control of Cheatgrass on Western Nevada Rangelands by Simulated Grazing Management	SAES
Cornell Univ. Itahca, NY 14853	Ward M. Tingey	86-CRSR-2-2790 8602356	$15,000	09/01/86 08/31/87	Nature of Resistance in Potato to the Colorado Potato Beetle, Leptinotarsa decemlineata	Land Grant-1862
Cornell Univ. Ithaca, NY 14853	Robert L. Plaisted	85-CRSR-2-2612 8602357	$14,000	06/01/85 10/31/87	Seedling Screening for Resistance to Potato Early Blight	SAES
Cornell Univ. Ithaca, NY 14853	C. A. Shoemaker	86-CRSR-2-2778 8602216	$20,000	07/01/86 06/30/87	An Integrated Approach to Management of Several Potato Pests: Simulation and Optimization Modelling	Land Grant-1862

SPECIAL RESEARCH GRANTS PROGRAM
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Cornell Univ. Ithaca, NY 14853	Robin R. Bellinder	86-CRSR-2-2783 8602217	$18,000	05/15/86 05/31/87	Development of an Integrated Production Management System for Irish Potatoes	SAES
Cornell Univ. Ithaca, NY 14853	William E. Fry	85-CRSR-2-2682 8602218	$20,000	07/01/85 06/30/87	Optimal Fungicide Use Strategies for Potato Plants	SAES
Cornell Univ. Ithaca, NY 14853	Rosemary Loria	85-CRSR-2-2680 8602213	$10,000	06/01/85 05/31/87	Common Scab of Potato: Effects of Cultivar Resistance and Inoculum Source	SAES
Cornell Univ. Ithaca, NY 14853	Dennis Gonsalves	85-CRSR-2-2698 8602210	$37,450	06/01/85 12/31/88	Control of Apple Union Necrosis and Decline through Cross Protection	SAES
Cornell Univ. Ithaca, NY 14853	G. W. Fick	85-CRSR-2-2723 8602385	$17,000	09/15/85 09/30/87	Conceptual Models of Pest Effects on Alfalfa for the Northeast	SAES
Cornell Univ. Ithaca, NY 14853	David Rosenberger	85-CRSR-2-2696 8602444	$25,050	06/01/85 12/31/88	A Strategy for Delaying Early Scab Sprays Based on Inoculum Dose	SAES

SPECIAL RESEARCH GRANTS PROGRAM
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Cornell Univ. Ithaca, NY 14853	Elmer E. Ewing	86-CRSR-2-2791 8602446	$15,288	07/01/86 06/30/87	Developing a Potato Growth Model that Simulates Defoliation	SAES
Oregon State Univ. Corvallis, OR 97331-6704	Larry L. Larson	86-CRSR-2-2952 8603235	$16,700	09/15/86 09/30/87	Economic Impact of Whitetop (*Cardaria* spp) on the Sagebrush Ecosystem of Eastern Oregon	SAES
Oregon State Univ. Corvallis, OR 97031	Helmut W. Riedl	86-CRSR-2-2959 8603242	$25,000	09/15/86 09/30/87	Resistance by the Codling Moth, *Cydia pomonella* (L.) to Diflubenzuron	SAES
Oregon State Univ. Corvallis, OR 97331	Mary L. Powelson	86-CRSR-2-2960 8603243	$26,500	09/15/86 09/30/87	Interactions Between *Meloidogyne chitwoodi* and *Verticillium dahliae* in Early Dying Disease of Potatoes	SAES
Pennsylvania State Univ. University Park, PA 16802	Arthur A. Hower	85-CRSR-2-2715 8602376	$23,265	07/01/85 06/30/87	Effect of Clover Root Curculio - Root Pathogen Interaction on Alfalfa Rhizosphere Dynamics	SAES
Pennsylvania State Univ. University Park, PA 16802	Daniel P. Knievel	85-CRSR-2-2713 8602381	$23,265	07/01/85 06/30/87	Optimization of Pest Management Strategies for the Potato Leafhopper on Alfalfa	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: INTERGRATED PEST MANAGEMENT
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Pennsylvania State Univ. University Park, PA 16802	Ke Chung Kim	86-CRSR-2-2780 8602370	$23,264	07/01/86 06/30/87	Biological Determinants in Host Selectivity of *Microctonus aethiopoides* (*Braconidae: Hymenoptera*)	Land Grant-1862
Pennsylvania State Univ. University Park, PA 16802	Zane Smilowitz	85-CRSR-2-2683 8602215	$10,000	07/01/85 06/30/87	Potato Plant Response to Insect Feeding and Abiotic Stresses	SAES
Pennsylvania State Univ. University Park, PA 16802	Felix L. Lukezic	85-CRSR-2-2714 8602372	$18,900	07/01/85 06/30/87	Biological Control of Forage Legume Leaf Diseases	Land Grant-1862
Univ. of Rhode Island Kingston, RI 02881	Richard Casagrande	84-CRSR-2-2460 8602220	$15,000	07/01/84 06/30/87	Biological Control of the Colorado Potato Beetle	SAES
Agricultural Expt. Stn. Knoxville, TN 37901-1071	Ernest C. Bernard	86-CRSR-2-2882 8603130	$48,900	09/01/86 08/31/88	Life Table Studies of Root-Knot and Cyst Nematodes	SAES
Texas Agricultural Expt. Stn. College Station, TX 77843	James L. Starr	86-CRSR-2-2883 8603123	$89,186	09/01/86 02/28/89	Combined Effects of *Fusarium wilt* and Root Knot *Nematodes* on *Plant* Mortality and Yield of Cotton	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: INTERGRATED PEST MANAGEMENT
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Texas Agricultural Expt. Stn. College Station, TX 77843	Darrell E. Bay	86-CRSR-2-2884 8603124	$74,400	09/01/86 08/31/88	Influence of Range Management on Biodynamics of the Horn Fly and Gulf Coast Tick	SAES
Agricultural Expt. Stn. College Station, TX 77843	F. W. Plapp, Jr.	86-CRSR-2-2890 8603125	$60,550	09/01/86 08/31/88	Monitoring and Characterizing Pyrethroid Resistance in the Tobacco Budworm	SAES
Utah State Univ. Logan, UT 84322-1445	Ting H. Hsiao	85-CRSR-2-2693 8603152	$19,500	06/15/85 12/31/87	Field Hybridization of Alfalfa Weevil Stains: Biological and Ecological Evaluations	SAES
Univ. of Vermont & State Agricultural College Burlington, VT 05405	Alan R. Gotlieb	85-CRSR-2-2648 8603036	$30,053	06/01/85 12/31/88	Interations of Sitona Injury, Fusarium Invasion, Mechanical Injury and Cold Acclimation of Alfalfa	SAES
Univ. of Vermont & State Agric. College Burlington, VT 05405	Lorraine Berkett	86-CRSR-2-2770 8602209	$63,153	05/01/86 04/30/89	Development of an Antibody-based Diagnostic Kit to Monitor Venturia inaequalis Ascospores	SAES
Washington State Univ. Pullman, WA 99164	Keith S. Pike	85-CRSR-2-2704 8603154	$14,500	07/01/85 06/30/88	Relationship of Aphid Vectors to BYDV Spread in Washington and Idaho Cereals	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: INTERGRATED PEST MANAGEMENT
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Washington State Univ. Pullman, WA 99164	Stephen D. Wyatt	86-CRSR-2-2961 8603244	$20,443	09/15/86 09/30/87	The Cyclical Breeding of Winter Wheat with Tolerance to Barley Yellow Dwarf	SAES
Washington State Univ. Pullman, WA 99164-5045	Gerald S. Santo	86-CRSR-2-2953 8603232	$17,000	09/15/86 09/30/87	Relationship of Root-Knot and Root-Lesion Nematodes to Eary Dying on Potato	SAES
Univ. of Wisconsin Madison, WI 53706	Douglas I. Rouse	85-CRSR-2-2650 8602363	$30,932	06/01/85 05/31/88	Evaluation of Three Models for Predicting Potato Plant Growth and Tuber Yield in Potato Systems	SAES
West Virginia Board Morgantown, WV 26506	Joseph E. Weaver	86-CRSR-2-2781 8602371	$9,700	05/15/86 05/31/86	Alfalfa Weevil Larval Densities in Relation to Yield and Quality of Alfalfa	Land Grant-1862
Univ. of Wyoming Laramie, WY 82071	Michael A. Smith	86-CRSR-2-2936 8603149	$18,500	09/01/86 08/31/87	Economic Threshold Levels of Big Sagebrush Control	SAES

TOTAL $2,787,120

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PESTICIDE CLEARANCE
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of California Davis, CA 95616	James N. Seiber	84-CRSR-2-2341 8600951	$259,562	03/01/84 02/28/87	Minor Use Pesticide Research-Western Region IR-4	SAES
Univ. of Florida Gainesville, FL 32611	Willis B. Wheeler	84-CRSR-2-2342 8601009	$259,562	02/01/84 01/31/88	Southern Region Leader Laboratory Cooperative Research for Minor Use Pesticide and Biologicals Registrations	SAES
Michigan State Univ. East Lansing, MI 48824	F. Matsumura	84-CRSR-2-2346 8601010	$259,564	02/15/84 06/30/87	North Central Leader Laboratory Program for Minor Use Pesticide Research to Supplement the IR-4 Program	SAES
Agricultural Expt. Stn. Rutgers, The State Univ. New Brunswick, NJ 08903	Robert H. Kupelian	86-CRSR-2-2751 8600646	$259,562	04/15/86 04/30/89	Clearances of Chemicals and Biologics for Minor of Special Uses/Pesticides	SAES
Cornell Univ. Ithaca, NY 14853	John B. Bourke	83-CRSR-2-2075 8600645	$259,562	03/01/83 09/30/87	NE Regional Laboratory for Analysis of Pesticide and Biologics for Minor or Special Uses	SAES
		TOTAL	$1,297,812			

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: MINOR USE ANIMAL DRUGS
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of California Davis, CA 95616	James N. Seiber	86-CRSR-2-2749 8600953	$43,420	05/01/86 04/30/87	Minor Use Animal Drug Research - Western Region IR-4	SAES
Univ. of Florida Gainesville, FL 32611	S. F. Sundlof	86-CRSR-2-2750 8601015	$43,418	04/01/86 03/31/87	Southern Region Leader Laboratory Cooperative Research for Minor or Specialty Use Animal Drugs	Vet School/College
Michigan State Univ. East Lansing, MI 48824	F. Matsumura	86-CRSR-2-2747 8601014	$43,418	05/01/86 04/30/87	North Central Leader Laboratory Program for Minor Use Drug Research to Supplement the IR-4 Program	Land Grant-1862
Agricultural Expt. Stn. Rutgers, The State Univ. New Brunswick, NJ 08903	Robert H. Kupelian	84-CRSR-2-2348 8601013	$43,418	03/01/84 02/29/88	Clearance of Chemicals and Biologics for Minor or Special Uses/Animal Drugs	SAES
Cornell Univ. Ithaca, NY 14853	John B. Bourke	83-CRSR-2-2081 8601012	$43,418	03/01/83 09/30/87	Northeast Regional Laboratory for Analysis of Animal Drugs for Minor Uses	SAES

TOTAL $217,092

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PESTICIDE IMPACT ASSESSMENT RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Auburn Univ. Auburn University, AL 36849	Robert H. Walker	84-CRSR-2-2380 8602316	$8,381	06/01/84 05/31/87	National Agricultural Pesticide Impact Assessment Program	SAES
Agricultural & Forestry Expt. Stn. Univ. of Alaska Fairbanks, AK 99701	Donald E. Carling	84-CRSR-2-2424 8602328	$5,000	06/15/84 06/30/87	Interactions Between Rhizoctonia solani AG-2-1 and Delia floralis on Cauliflower	SAES
Univ. of Arkansas Agricultural Expt. Stn. Fayetteville, AR 72701	Robert E. Frans	83-CRSR-2-2109 8602298	$12,860	07/01/83 06/30/87	Pesticide Impact Assessment Research and Data Analyses for Arkansas	SAES
Agricultural Expt. Stn. Univ. of Arizona Tucson, AZ 85721	Leon Moore	83-CRSR-2-2113 8602344	$7,066	09/15/83 09/30/87	Collection and Analysis of Information Relative to the Use of Pesticides	SAES
Univ. of California Berkeley, CA 94720	Harold G. Alford	83-CRSR-2-2122 8601696	$29,215	09/15/83 03/31/88	California Pesticide Impact Assessment Program	Land Grant-1862
Univ. of California Berkeley, CA 94720	Harold G. Alford	83-CRSR-2-2327 8601697	$335,166	09/15/83 12/31/87	Western Region Pesticide Impact Assessment Program	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PESTICIDE IMPACT ASSESSMENT RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Agricultural Expt. Stn. Colorado State Univ. Fort Collins, CO 80523	Howard F. Schwartz	86-CRSR-2-2795 8602287	$7,044	06/01/86 05/31/87	Dry Bean Bacterial Epiphyte Ecology and Management with Copper Bactericide	SAES
Connecticut Agricultural Expt. Stn. New Haven, CT 06504	Charles R. Frink	86-CRSR-2-2956 8603240	$5,638	09/15/86 09/30/87	Persistence of Pesticides in Ground Water in Connecticut	SAES
Agricultural Expt. Stn. Univ. of Delaware Newark, DE 19717-1303	P. P. Barbutis	83-CRSR-2-2148 8602342	$5,000	07/01/83 09/30/87	Pesticide Impact Assessment and Data Analysis	SAES
Univ. of Florida Gainesville, FL 32611	L. T. Ou	85-CRSR-2-2552 8602296	$14,540	05/01/85 12/31/87	Microbial Degradation of Phenamiphos and Telone II in Contaminated Soils	SAES
Univ. of Georgia Res. Fdn., Inc. Athens, GA 30602	C. Wayne Berisford	86-CRSR-2-2771 8602339	$15,860	09/15/86 09/30/87	Efficacy and Persistence of Slow-release Pesticide Formulations for Prevention of Bark Beetle Attacks	SAES
Agricultural Expt. Stn. Univ. of Guam Mangilao, GU 96923	D. M. Nafus	86-CRSR-2-2772 8602347	$5,000	05/01/86 04/30/87	Control of New Pests on Guam with Pesticides	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PESTICIDE IMPACT ASSESSMENT RESEARCH
PUBLIC LAW 89-105
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Hawaii Inst. of Tropical Agriculture & Human Res. 3050 Mafle Way Univ. of Hawaii Honolulu, HI 96822	John W. Hylin	83-CRSR-2-2111 8602327	$5,645	05/01/83 04/30/87	Pesticide Impact Assessment, Research and Data Analysis	SAES
Iowa State Univ. of Science & Technology Iowa Agriculture & Home Economics Expt. Stn. Ames, IA 50011	Paul A. Dahm	83-CRSR-2-2099 8602289	$21,787	04/01/83 03/31/87	Iowa's Contribution, National Agricultural Pesticide Impact Assessment Program (NAPIAP)	SAES
Univ. of Idaho Moscow, ID 83843	Gene P. Carpenter	83-CRSR-2-2097 8602307	$7,367	07/01/83 09/30/87	Idaho's Pesticide Impact Assessment Program	Land Grant-1862
Agricultural Expt. Stn. Univ. of Illinois Urbana, IL 61801	B. A. Jones, Jr.	84-CRSR-2-2381 8602321	$22,413	06/15/84 09/30/87	Pesticide Impact Assessment Research and Data Analysis	SAES
Purdue Univ. West Lafayette, IN 47907	Thomas N. Jordan	84-CRSR-2-2382 8602636	$12,771	06/01/84 06/30/87	Pesticide Use Under National Pesticide Assessment Program	SAES
Kansas State Univ. Manhattan, KS 66506	David L. Hensley	86-CRSR-2-2775 8602325	$11,216	09/15/86 09/30/87	Pesticide Effects on Nitrogen Fixation in Legumes	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PESTICIDE IMPACT ASSESSMENT RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Kentucky Lexington, KY 40546	Bobby C. Pass	83-CRSR-2-2084 8602224	$6,824	04/15/83 04/30/87	Pesticide Impact Research and Data Analysis	SAES
Louisiana State Univ. & A&M College Baton Rouge, LA 70893	Jerry B. Graves	84-CRSR-2-2355 8602300	$9,533	09/01/84 08/31/87	Pesticide Impact Assessment Research and Data Analysis	SAES
Univ. of Massachusetts Amherst, MA 01003	Roy G. Van Driesche	83-CRSR-2-2132 8603037	$5,257	07/01/83 06/30/87	Assessment of Biological Control Opportunities and of the Colorado Potato Beetle Egg Parasitoid *Edovum Puttleri* in Massachusetts	SAES
Univ. of Maryland College Park, MD 20742	Allen L. Steinhauer	83-CRSR-2-2222 8602335	$5,799	09/15/83 09/30/87	Participation in the National Pesticide Impact Assessment Program (NAPIAP)	SAES
Univ. of Maryland College Park, MD 20742	Lorin R. Krusberg	86-CRSR-2-2746 8601011	$25,000	03/01/86 08/31/87	Assistance in the National Agricultural Pesticide Impact Assessment Program	SAES
Agricultural Expt. Stn. Univ. of Maine Orono, ME 04469	James F. Dill	83-CRSR-2-2091 8602340	$5,785	04/01/83 09/30/87	Maine's Use of the National Pesticide Information Retrieval System (NPIRS)	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PESTICIDE IMPACT ASSESSMENT RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Michigan State Univ. East Lansing, MI 48824	George W. Bird	83-CRSR-2-2112 8603164	$10,075	09/01/83 08/31/87	Michigan Pesticide Impact Assessment Program	SAES
Univ. of Minnesota St. Paul, MN 55108	Phillip K. Harein	83-CRSR-2-2095 8602295	$15,140	09/15/83 09/30/87	Minnesota Pesticide Impact Assessment Program	SAES
Univ. of Missouri Columbia, MO 65211	Mahlon L. Fairchild	83-CRSR-2-2106 8602324	$11,573	06/01/83 11/30/87	Pesticide Impact Assessment Research and Data Analysis	SAES
Agricultural & Forestry Expt. Stn. Mississippi State Univ. Mississippi State, MS 39762	Jack T. Reed	83-CRSR-2-2108 8602180	$12,577	05/01/83 04/30/87	Pesticide Impact Assessment on Pre-RPAR and RPAR Candidates in Mississippi	SAES
Montana State Univ. Bozeman, MT 59717-0002	J. Riesselman	84-CRSR-2-2359 8602206	$6,422	09/01/84 09/30/87	Montana Pesticide Impact Assessment Program	SAES
North Carolina Agricultural Res. Serv. North Carolina State Univ. Raleigh, NC 27695-7601	Thomas J. Sheets	83-CRSR-2-2098 8602303	$13,025	09/15/83 09/30/87	Pesticide Impact Assessment Research and Data Analysis	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PESTICIDE IMPACT ASSESSMENT RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Agricultural Expt. Stn. North Dakota State Univ. Fargo, ND 58105	John D. Nalewaja	83-CRSR-2-2115 8602337	$7,774	04/01/83 03/31/88	Pesticide Application Technology and Usage	SAES
Agricultural Expt. Stn. Univ. of Nebraska Lincoln, NE 68583	Roger E. Gold	84-CRSR-2-2364 8602320	$14,787	04/15/84 09/30/87	Participation in the National Agricultural Pesticide Impact Assessment Program	SAES
Agricultural Expt. Stn. Univ. of New Hampshire Durham, NH 03824	Stanley R. Swier	83-CRSR-2-2146 8602200	$5,000	09/15/83 09/30/87	Pesticide Impact Assessment and Data Analysis	SAES
New Jersey Agric. Expt. Stn. Rutgers, The State Univ. New Brunswick, NJ 08903	Richard A. Fenske	83-CRSR-2-2121 8602330	$6,257	09/15/83 09/30/87	Evaluation of Protective Clothing Fabric Efficiency by Fluorescent Tracer Techniques	SAES
New Mexico State Univ. Las Cruces, NM 88003	H. GrantKinzer	83-CRSR-2-2096 8603176	$5,320	09/15/83 09/30/87	Pesticide Impact Assessment Research and Data Analysis in New Mexico	SAES
Agricultural Expt. Stn. Univ. of Nevada Reno, NV 89557	Harry G. Smith	84-CRSR-2-2426 8602205	$5,000	06/01/84 05/31/87	Evaluation of Data on RPAR and Pre-RPAR Pesticides Essential to Nevada Agriculture	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PESTICIDE IMPACT ASSESSMENT RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Cornell Univ. Ithaca, NY 14853	Kean S. Goh	83-CRSR-2-2120 8602315	$10,915	09/15/83 09/30/87	Pesticide-Pest Impact Assessment	SAES
Ohio Agricultural Research & Development Center Wooster, OH 44691	Acie C. Waldron	84-CRSR-2-2374 8602222	$13,159	06/01/84 09/30/87	Ohio Program for National Pesticide Impact Assessment Program	SAES
Ohio Agricultural Research & Development Center Ohio State Univ. Wooster, OH 44691	Acie C. Waldron	86-CRSR-2-2757 8602179	$335,166	04/15/86 04/30/88	North Central Region Special Studies Program for Pesticide Impact Assessment	SAES
Agricultural Expt. Stn. Oklahoma State Univ. Stillwater, OK 74078	O. NormanNesheim	84-CRSR-2-2372 8602288	$8,595	05/15/84 05/31/87	Continued Participation in the National Agricultural Pesticide Impact Assessment Program	SAES
Agricultural Expt. Stn. Oregon State Univ. Corvallis, OR 97331	James M. Witt	83-CRSR-2-2107 8602294	$7,356	09/15/83 09/30/87	Oregon Pesticide Impact Assessment Program	SAES
Pennsylvania State Univ. University Park, PA 16802	Herbert Cole, Jr.	82-CRSR-2-2057 8600650	$335,166	09/30/82 09/29/87	Continued Implementation of the Northeast Region Pesticide Impact Assessment Program	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PESTICIDE IMPACT ASSESSMENT RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Pennsylvania State Univ. University Park, PA 16802	Herbert Cole, Jr.	82-CRSR-2-2057 8603247	$5,000	09/30/82 09/29/87	Continued Implementation of the Northeast Region Pesticide Impact Assessment Program	SAES
Pennsylvania State Univ. University Park, PA 16802	Milford Heddleson	83-CRSR-2-2093 8602299	$8,432	04/01/83 09/30/87	Pennsylvania Participation in National Pesticide Impact Assessment Program	Land Grant-1862
Agricultural Expt. Stn. Univ. of Puerto Rico Venezuela Contract Station Rio Piedras, PR 00927	Nilsa M. Acin-Diaz	84-CRSR-2-2383 8602348	$5,320	09/15/84 09/30/87	Pesticide Impact Assessment Research and Data Analysis	SAES
Agricultural Expt. Stn. Univ. of Rhode Island Kingston, RI 02881	W. M. Sullivan	83-CRSR-2-2116 8602336	$5,000	05/01/83 04/30/87	Early Season Sub-Solum Losses of Atrazine in Southern New England	SAES
Agricultural Expt. Stn. Clemson Univ. Clemson, SC 29634	W. P. DuBose, III	83-CRSR-2-2114 8602334	$8,489	09/15/83 09/30/87	South Carolina Participation in National Agricultural Pesticide Impact Assessment	SAES
Agricultural Expt. Stn. Clemson Univ. Clemson, SC 29634	James E. Halpin	86-CRSR-2-2752 8601459	$335,166	03/15/86 03/31/88	Southern Region SAES Special Studies for Pesticide Impact Assessments (Division of NAPIAP)	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PESTICIDE IMPACT ASSESSMENT RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Agricultural Expt. Stn. South Dakota State Univ. Brookings, SD 57007	David Walgenbach	83-CRSR-2-2118 8602338	$7,203	05/01/83 04/30/87	SDAES Participation in NAPIAP	SAES
Agricultural Expt. Stn. Univ. of Tennessee Knoxville, TN 37901-1071	Carroll J. Southards	83-CRSR-2-2094 8602297	$8,142	09/15/83 09/30/87	Pesticide Impact Assessment Research and Data Analysis	SAES
Agricultural Expt. Stn. Texas A&M Univ. College Station, TX 77843	Rodney L. Holloway	83-CRSR-2-2318 8602323	$19,451	09/15/83 11/30/87	Benefit and Uses of Pesticides in Texas	SAES
Utah State Univ. Logan, UT 84322	Howard M. Deer	83-CRSR-2-2117 8602318	$5,030	05/01/83 04/30/87	Utah Participation, National Agricultural Pesticide Impact Assessment Program (NAPIAP)	SAES
Virginia Polytechnic Inst. & State Univ. Virginia Agricultural Expt. Stn. Blacksburg, VA 24061	Michael J. Weaver	84-CRSR-2-2371 8602317	$8,518	05/15/84 05/30/87	Virginia's Contribution to National Pesticide Impact Assessment (NAPIAP)	Land Grant-1862
Univ. of Vermont & State Agricultural College Burlington, VT 05405	Alan R. Gotlieb	83-CRSR-2-2092 8601699	$5,000	04/01/83 08/31/87	Efficacy and Interactions of Herbicides with Biological Control Agents for Control of Velvetleaf	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PESTICIDE IMPACT ASSESSMENT RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Agricultural Res. Ctr. Washington State Univ. Pullman, WA 99164	Richard C. Maxwell	83-CRSR-2-2085 8602301	$9,948	04/01/83 03/31/87	Benefit Assessment of Pesticides in Washington State	SAES
Univ. of Wisconsin Madison, WI 53706	Jeffrey A. Wyman	83-CRSR-2-2110 8602319	$11,491	09/15/83 09/30/87	Pesticide Impacts in Wisconsin	SAES
West Virginia Univ. Morgantown, WV 26506	John F. Amiecki	86-CRSR-2-2774 8602306	$5,000	05/01/86 06/30/87	Pesticide Impact Assessment Support: Refining Methods for Pesticide Detection	SAES
Agricultural Expt. Stn. Univ. of Wyoming Laramie, WY 82071	Alvin F. Gale	84-CRSR-2-2356 8602302	$5,000	05/01/84 06/30/87	Continued Participation in the National Agricultural Pesticide Impact Assessment Program	SAES

TOTAL $1,865,664

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: RURAL DEVELOPMENT CENTERS
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Iowa Agricultural & Home Economics Expt. Stn. Iowa State Univ. Ames, IA 50011	Peter F. Korsching	84-CRSR-2-2512 8602554	$86,031	09/01/84 09/30/88	North Central Regional Center for Rural Development	SAES
Mississippi Agric. & Forestry Expt. Stn. Mississippi State Univ. Mississippi State, MS 39762	H. Doss Brodnax, Jr.	86-CRSR-2-2777 8602322	$86,031	06/01/86 05/31/88	Southern Rural Development Center	SAES
Oregon State Univ. Corvallis, OR 97331	Russell C. Youmans	86-CRSR-2-2761 8601802	$86,031	09/15/86 09/30/88	Western Rural Development Center	SAES
Pennsylvania State Univ. University Park, PA 16802	Daryl K. Heasley	86-CRSR-2-2760 8602208	$86,031	06/01/86 05/31/89	Northeast Regional Center for Rural Development	Land Grant-1862

TOTAL $344,124

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: SOYBEAN CYST NEMATODE IN MO
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Missouri Columbia, MO 65211	S. C. Anand	86-CRSR-2-2835 8602736	$270,180	07/15/86 07/31/89	Studies on Diapause in *Heterodera glycines* and Gene Expression for Resistance in Soybeans	SAES

TOTAL $270,180

PROGRAM AREA: BEAN & BEET RESEARCH IN MI

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Michigan State Univ. East Lansing, MI 48824	Alvin J. M. Smucker	83-CRSR-2-2311 8602369	$88,164	08/01/83 08/31/87	Maximization of Economic Yields by Improving Dry Edible Bean and Sugarbeet Production Systems	SAES

TOTAL $88,164

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL HEALTH RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of California Davis, CA 95616	Dwight C. Hirsh	86-CRSR-2-2858 8601908	$60,000	09/01/86 08/31/88	Construction of a DNA Probe Specific for Avian Strains of *Pasteurella*	Vet School/College
Univ. of California Davis, CA 95616	Hans P. Riemann	86-CRSR-2-2901 8602030	$54,083	09/01/86 08/31/87	Direct Identification of *Mycobacterium paratuberculosis* in Cattle Feces	Vet School/College
Univ. of California Davis, CA 95616	Laurel J. Gershwin	86-CRSR-2-2918 8601986	$149,359	09/01/86 08/31/88	Bovine Respiratory Syncytial Virus Specific IgE: Role in Pathogensis	Vet School/College
Univ. of California Davis, CA 95616	M. E. Mount	86-CRSR-2-2852 8602031	$106,000	09/01/86 08/31/88	Immunoassay Screening for the Hepatotoxic Pyrrolizidine Alkaloids in Cattle	Vet School/School
Univ. of California Davis, CA 95616	Ronald Y. Chuang	86-CRSR-2-2805 8602121	$149,945	08/01/86 07/31/88	Refinement of Genetic Probes for the Detection of Bluetongue Virus in Infected Animals	Land Grant-1862
Colorado State Univ. Fort Collins, CO 80523	Robert P. Ellis	86-CRSR-2-2907 8601990	$149,967	09/01/86 08/31/89	An Oligonucleotide Hybridization Approach to *Bacteroides nodosus* Pilus Typing	Vet School/College

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL HEALTH RESEARCH
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Connecticut Storrs, CT 06268	Tsu-Ju Yang	86-CRSR-2-2895 8602171	$114,356	08/15/86 08/31/88	Immunoregulatory Role of Lymphocyte Subsets in Resistance to Bovine Mastitis	SAES
Univ. of Florida Gainesville, FL 32611	Alfred F. Esser	86-CRSR-2-2908 8602059	$149,890	09/01/86 08/31/89	Complement Mediated Defense Against Respiratory Disease Complex	Vet School/College
Univ. of Florida Gainesville, FL 32611	E. C. Greiner	86-CRSR-2-2808 8602052	$74,750	08/01/86 07/31/88	Epidemiology of Bluetongue Virus in Central America and the Caribbean	Vet School/College
Univ. of Georgia Res. Fdn. Athens, GA 30602	W. L. Ragland	86-CRSR-2-2853 8602133	$60,360	09/01/86 08/31/89	Nasal and Bursal Immunization for Mycoplasma	Vet School/College
Univ. of Georgia Res. Fdn., Inc. Athens, GA 30602	Phil D. Lukert	86-CRSR-2-2836 8602148	$93,275	07/01/86 06/30/89	Pathogenic and Antigenic Analysis of Infectious Bursal Disease Viral Variants	Vet School/College
Iowa State Univ. of Science & Technology Ames, IA 50011	Richard F. Ross	86-CRSR-2-2897 8601920	$146,025	09/15/86 09/30/89	Immunogenic and Virulence Factors in Mycoplasmal Pneumonia of Swine	Vet School/College

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL HEALTH RESEARCH
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Louisiana State Univ. & A&M College Baton Rouge, LA 70803	Johannes Storz	86-CRSR-2-2871 8602026	$141,971	09/01/86 08/31/89	Resistance Factors in Coronaviral Infections of Calves	Vet School/College
Louisiana State Univ. & A&M College Baton Rouge, LA 70803	K. L. Schnorr	86-CRSR-2-2909 8602018	$120,450	09/01/86 08/31/89	A Genetically Engineered Vaccine for Chlamydia-induced Polyarthritis in Sheep	Vet School/College
Louisiana State Univ. & A&M College Baton Rouge, LA 70803	M. J. Newman	86-CRSR-2-2832 8602003	$136,334	09/15/86 09/30/89	*Brucella abortus* Vaccination and Immune Response Genes in Beef Cattle	Vet School/College
Univ. of Maryland College Park, MD 20742	Davis B. Snyder	86-CRSR-2-2837 8602070	$60,057	09/01/86 08/31/88	A Definition of the Potential Role of Variant Newcastle Disease Virus Isolates on Poultry Health	Vet School/College
Michigan State Univ. East Lansing, MI 48824	Leland F. Velicer	86-CRSR-2-2870 8601899	$75,000	09/01/86 08/31/88	Recombinant DNA Proteins in Marek's Disease: Immunosuppression and Protection	Vet School/College
Univ. of Minnesota St. Paul, MN 55104	David G. Thawley	86-CRSR-2-2929 8601938	$149,464	09/15/86 09/30/89	Molecular and Epidemiological Aspects of Pseudorabies Virus Latency in Swine	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL HEALTH RESEARCH
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Minnesota St. Paul, MN 55104	G. E. Ward	86-CRSR-2-2893 8602109	$77,434	08/15/86 08/31/88	Study of Pathogensis Proliferative Enteritis Using DNA Probes	Vet School/College
Univ. of Minnesota St. Paul, MN 55104	M. M. Walser	86-CRSR-2-2851 8601838	$102,142	07/15/86 07/31/89	Metabolic Interactions of Vitamin A and D: Relevance to Tibial Dyschondroplasia	Vet School/College
Univ. of Missouri Columbia, MO 65211	Gerald M. Buening	86-CRSR-2-2855 8602020	$96,147	09/01/86 08/31/88	Detection of *Anaplasma marginale* in Bovine Tissue by *in situ* Hybridization	Vet School/College
Washington Univ. St. Louis, MO 63130	Roy Curtiss III	86-CRSR-2-2854 8602095	$90,000	09/01/86 08/31/88	Genetic Analysis of Virulence of Avian Respiratory Bacterial Pathogens	Public Univ/College
North Carolina Agricultural Res. Serv. North Carolina State Univ. P.O. Box 7601 Raleigh, NC 27695-7601	N. J. MacLachlan	86-CRSR-2-2801 8601891	$145,300	09/01/86 08/31/89	Pathogenesis of Bluetongue Virus Infection of Cattle	SAES
Univ. of New Hampshire Durham, NH 03824	R. G. Strout	86-CRSR-2-2838 8601897	$74,832	09/15/86 09/30/88	Humoral and Cellular Responses to Recombinant Coccidia Antigens	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL HEALTH RESEARCH
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Cornell Univ. Ithaca, NY 14853	John F. Timoney	86-CRSR-2-2839 8602063	$107,205	07/01/86 06/30/88	Identification and Artificial Synthesis of the Peptide of *S. equi* Active in Mucosal Immunity	Vet School/College
Cornell Univ. Ithaca, NY 14853	Karel A. Schat	86-CRSR-2-2859 8602161	$84,418	09/01/86 08/31/89	Rotavirus Infection in Intact and Immunocompromised Chickens	Vet School/College
Ohio State Univ. Res. Fdn. Columbus, OH 43212	Kenneth W. Theil	86-CRSR-2-2892 8601894	$44,650	09/01/86 08/31/88	Genomic Probes to Detect and Differentiate Rotavirus Serogroups Infecting Swine	SAES
Ohio State Univ. Res. Fdn. Columbus, OH 43212	Linda J. Saif	86-CRSR-2-2910 8602163	$120,694	09/01/86 08/31/89	Serotyping of Porcine Rotaviruses Using Monoclonal Antibodies	SAES
Oklahoma State Univ. Stillwater, OK 74078	Anthony W. Confer	86-CRSR-2-2880 8602017	$147,930	08/15/86 08/31/89	Characterization of an Immunogenic Carbohydrate-Protein Subunit of *P. haemolytica*	Vet School/College
Oregon State Univ. Corvallis, OR 97331	Bradford B. Smith	86-CRSR-2-2919 8601929	$150,000	09/15/86 09/30/88	Mastitis-Metritis-Agalactia Syndrome: The Role of Endotoxines in Pigs	Vet School/College

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL HEALTH RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Rhode Island Kingston, RI 02881	Pei W. Chang	86-CRSR-2-2872 8602248	$64,028	09/15/86 09/30/87	Rapid Detection of Infectious Hematopoietic Necrosis Virus Disease in Salmonids	SAES
South Dakota State Univ. Agricultural Expt. Stn. Brookings, SD 57007	David H. Francis	86-CRSR-2-2898 8602039	$72,243	09/15/86 09/30/89	Modified Live Escherichia coli Vaccine for Colibacillosis of Pigs	SAES
Texas A&M Res. Fdn. Box 3578 College Station, TX 77843	Ellen W. Collisson	86-CRSR-2-2911 8601975	$148,188	09/01/86 08/31/89	Molecular Differentiation of Noncytopathic and Cytopathic Isolates of Bovine Viral Diarrhea Virus	Vet School/College
Texas A&M Res. Fdn. College Station, TX 77843	Edwin H. Robinson	86-CRSR-2-2874 8602232	$9,344*	09/15/86 09/30/87	Nutrient Requirement Studies with Red Swamp Crayfish	Land Grant-1862
Texas A&M Res. Fdn. College Station, TX 77843	R. Smith	86-CRSR-2-2833 8602069	$149,919	09/01/86 08/31/89	Specificity of T Lymphocytes Responding to Brucella abortus: A Clonal Analysis	Vet School/College
Texas A&M Res. Fdn. College Station, TX 77843	T. A. Ficht	86-CRSR-2-2806 8602049	$149,770	09/01/86 08/31/89	Construction of Improved Brucella Abortus Vaccine Stains Via Transposon Mutagenesis	Land Grant-1862

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL HEALTH RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Texas A&M Res. Fdn. P.O. Box 3578 College Station, TX 77843	Gerald N. Woode	86-CRSR-2-2857 8601872	$109,998	09/01/86 08/31/89	Rotavirus Vaccination and Studies on Cross Protection Between Different Serotypes	Vet School/College
Southwest Texas State Univ. San Marcos, TX 78666	Joseph Tomasso, Jr.	86-CRSR-2-2873 8602077	$34,795	09/01/86 08/31/87	Plasma Glutamine Concentrations as an Indicator of Ammonia Inhibition of Growth in Channel Catfish	Public Univ/College
Washington State Univ. Pullman, WA 99164	Boon P. Chew	86-CRSR-2-2862 8601854	$82,787	08/15/86 08/31/87	Vitamin A and B-carotene Effects on Phagocyte and Lymphocyte Functions in Vitro	SAES
Washington State Univ. Pullman, WA 99164	H. D. Liggitt	86-CRSR-2-2849 8602152	$149,431	09/01/86 08/31/88	Role of Arachidonate Metabolism in Virus-Induced Alveolar Macrophage Dysfunction	Vet School/College
Washington State Univ. Pullman, WA 99164	L. E. Perryman	86-CRSR-2-2861 8601936	$113,857	08/01/86 07/31/88	Protection of Calves Against Cryptosporidiosis with Anti-sporozoite Antibodies	Vet School/College
Washington State Univ. Pullman, WA 99164	R. W. Leid	86-CRSR-2-2912 8602023	$120,187	09/01/86 08/31/88	Cloning of Protective Juvenile *Fasciola hepatica* Antigens	Vet School/College

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL HEALTH RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Washington State Univ. Pullman, WA 99164	T. C. McGuire	86-CRSR-2-2850 8602041	$55,045	09/01/86 08/31/88	Protection Against EIA Virus Variants with a Subunit Vaccine	Vet School/College
Washington State Univ. Pullman, WA 99164	Thomas J. Inzana	86-CRSR-2-2799 8601957	$113,399	09/01/86 08/31/88	A Subunit Vaccine for Prevention of Haemophilus somnus Reproductive Disease	Land Grant-1862
Washington State Univ. Pullman, WA 99164	William C. Davis	86-CRSR-2-2913 8602051	$127,357	09/01/86 08/31/89	Genetic Resistance to Mastitis	Vet School/College
Washington State Univ. Pullman, WA 99164-5045	Lynette B. Corbeil	86-CRSR-2-2891 8602037	$69,008	09/01/86 08/31/89	Mechanisms of Protection Against Calfhood Colisepticemia	Land Grant-1862
Univ. of Wisconsin Madison, WI 53706	Charles Czuprynski	86-CRSR-2-2847 8602184	$147,867	09/01/86 08/31/89	Bovine Leukocyte Modulation by Components of P. haemolytica and H. sommus	Land Grant-1862
Univ. of Wisconsin Madison, WI 53706	Gary A. Splitter	86-CRSR-2-2848 8602169	$39,004	09/01/86 08/31/87	Effector Cell Function Against IBR Virus	Land Grant-1862

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL HEALTH RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Wisconsin Madison, WI 53706	Gary A. Splitter	86-CRSR-2-2863 8602140	$54,084	09/15/86 09/30/88	Application of a DNA Probe Specific for Mycobacterium Paratuberculosis	Land Grant-1862
Univ. of Wisconsin Madison, WI 53706	G. J. Letchworth III	86-CRSR-2-2902 8602165	$149,999	08/15/86 02/28/90	Heterogeneity fo the Cellular Response against Bovid Herpesvirus-1 Glycoproteins	SAES
Univ. of Wisconsin Madison, WI 53706	L. R. Backstrom	86-CRSR-2-2904 8602040	$124,392	09/01/86 08/31/89	Swine Atrophic Rhinitis: Immunochemical Probes for *P. multocida* Antigen and Toxin	Vet School/College
Univ. of Wisconsin Madison, WI 53706	Ronald D. Schultz	86-CRSR-2-2905 8601934	$91,600	09/01/86 08/31/89	Immunosuppression Associated with Vitamin E-Selenium Deficiency in Swine	Vet School/College
		TOTAL	$5,408,340			

* Split Funded with Aquaculture for a total awarded amount of $11,557

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: AQUACULTURE, STONEVILLE, MS
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Agricultural & Forestry Expt. Stn. Mississippi State Univ. Mississippi State, MS 39762	Craig Tucker	86-CRSR-2-2809 8602313	$379,200	07/01/86 06/30/89	Off-Flavor in Mississippi Pond Raised Channel Catfish	SAES

TOTAL $379,200

PROGRAM AREA: DAIRY & BEEF PHOTOPERIOD RESEARCH, MI

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Michigan State Univ. East Lansing, MI 49824	H. Allen Tucker	84-CRSR-2-2340 8601658	$31,284	06/01/84 11/30/87	Photoperiod-Induced Changes in Growth and Composition Steroid-Implanted Steers	Land Grant-1862

TOTAL $31,284

COOPERATIVE STATE RESEARCH SERVICE
PROGRAM AREA: AQUACULTURE RESEARCH
PUBLIC LAW 89-106
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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of California Davis, CA 95616	Serge I. Doroshov	86-CRSR-2-2875 8602269	$79,960	09/15/86 09/30/88	Ovarian Maturation in Domestically Raised White Sturgeon	SAES
Louisiana State Univ. & A&M College Baton Rouge, LA 70803	William R. Wolters	86-CRSR-2-2878 8602279	$28,237	09/15/86 09/30/88	Genetic Improvement in Red Swamp Crawfish, Procambarus clarkii	SAES
Oregon State Univ. Corvallis, OR 97331	Carl B. Schreck	86-CRSR-2-2876 8602228	$80,000	09/15/86 09/30/88	Enhancement of Hormone-induced Ovulation in Pacific Salmon	Land Grant-1862
Texas A&M Res. Fdn. College Station, TX 77843	Edwin H. Robinson	86-CRSR-2-2874 8602232	$2,213*	09/15/86 09/30/87	Nutrient Requirement Studies with Red Swamp Crayfish	Land Grant-1862
Washington State Univ. Pullman, WA 99164	Gary H. Thorgaard	86-CRSR-2-2877 8602276	$79,770	08/15/86 08/31/88	Production of Inbred Lines of Rainbow Trout by All-paternal Inheritance	Land Grant-1862
		TOTAL	$270,180			

*Split Funded with Animal Health for the awarded amount of $11,557

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: GERMPLASM RESOURCES RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of California Davis, CA 95616	Dan E. Parfitt	85-CRSR-2-2542 8601321	$325,460	04/01/85 02/28/87	National Fruit and Nut Germplasm Repository	SAES
Univ. of California Riverside, CA 92521	David J. Gumpf	85-CRSR-2-2559 8603133	$92,860	04/01/85 03/31/88	A National Clonal Germplasm Repository for Citrus	SAES
Cornell Univ. Ithaca, NY 14853	Robert M. Pool	86-CRSR-2-2856 8603034	$138,838	09/01/86 08/31/87	Clonal Repository for Apples and Grapes	SAES
Oregon State Univ. Corvallis, OR 97331	Conrad J. Weiser	85-CRSR-2-2561 8601490	$344,390	04/01/85 03/31/87	Collect-Evaluate, Maintain and Distribute Germplasm of Clonally Propagated Crops	SAES

TOTAL $901,548

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PEACH TREE SHORT LIFE, SC
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Clemson Univ. Clemson, SC 29634	David W. Cain	85-CRSR-2-2573 8602396	$173,484	06/01/85 08/31/88	Factors Contributing to and Control of Peach Tree Short Life in South Carolina	SAES
		TOTAL	$173,484			

PROGRAM AREA: BLUEBERRY SHOESTRING VIRUS, MI

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Michigan State Univ. East Lansing, MI 48824	Donald C. Ramsdell	86-CRSR-2-2758 8601801	$87,216	04/15/86 04/30/87	An Integrated Approach to Blueberry Virus Disease Control	SAES
		TOTAL	$87,216			

PROGRAM AREA: MOSQUITO RESEARCH RICELAND AGROECOSYSTEM

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Texas A&M Res. Fdn. College Station, TX 77843	J. K. Olson	86-CRSR-2-2831 8602557	$432,288	07/01/86 06/30/87	Riceland Mosquito Management Program	SAES
		TOTAL	$432,288			

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: TCK SMUT (WHEAT)
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Idaho Moscow, ID 83843	Harry S. Fenwick	86-CRSR-2-2796 8602333	$55,278	06/01/86 05/31/87	Detection and Control of TCK Smut in Winter Wheat	SAES
Agricultural Expt. Stn. Montana State Univ. Bozeman, MT 59717	Donald E. Mathre	86-CRSR-2-2753 8601491	$55,369	04/01/86 03/31/87	Research for Controlling Dwarf Smut (TCK) in Hard Red Winter Wheat in Montana	SAES
Oregon State Univ. Corvallis, OR 97331	Robert E. Witters	86-CRSR-2-2797 8602352	$81,200	06/01/86 05/31/87	Control of Dwarf Smut (TCK) Tilletia Controversa of Soft White Wheat	SAES
Utah State Univ. Logan, UT 84322-1415	Wade G. Dewey	86-CRSR-2-2768 8602221	$39,020	07/01/86 06/30/87	Control of Dwarf Bunt (TCK) of Wheat Through Breeding Resistant Varieties	SAES
Washington State Univ. Pullman, WA 99164-6240	Ruben Duran	84-CRSR-2-2357 8602290	$94,297	04/01/84 03/31/88	TCK Smut of Wheat	SAES

TOTAL $325,164

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: SUNFLOWER INSECTS, ND & SD
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Agricultural Expt. Stn. North Dakota State Univ. Fargo, ND 58105	C. Y. Oseto	84-CRSR-2-2362 8602282	$135,090	04/01/84 03/31/88	Insect Attraction to Sunflower and Characterization of Plant Resistance	SAES
Agricultural Expt. Stn. South Dakota State Univ. Brookings, SD 57007	Charles Lay	86-CRSR-2-2792 8602449	$45,030	06/15/86 12/31/87	Development of Tissue Culture Techniques in Sunflower (Helianthus annuus L.)	SAES

TOTAL $180,120

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: TROPICAL & SUBTROPICAL RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of California Irvine, CA 92717	Joseph Arditti	86-CRSR-2-2820 8602596	$56,110	07/01/86 06/30/87	Selection of Salinity-tolerant Taro	Land Grant-1862
Univ. of Florida Gainesville, FL 32610	Charles H. Courtney	85-CRSR-2-2580 8602517	$39,132	07/01/85 06/30/87	Epidemiology and Control of Trypanosoma vivax of Ruminants in the Caribbean	SAES
Univ. of Florida Gainesville, FL 32611	C. W. McCoy	86-CRSR-2-2821 8602496	$45,000	07/01/86 06/30/87	Survival of Beauveria bassiana as a Biological Control Agent in Tropical Soils	Land Grant-1862
Univ. of Florida Gainesville, FL 32611	Carrol G. Chambliss	84-CRSR-2-2506 8602493	$26,000	07/01/84 10/31/87	Persistence, Productivity and N Value of Tropical Legumes in Grass Pastures	SAES
Univ. of Florida Gainesville, FL 32611	David Baltensperger	85-CRSR-2-2576 8602516	$11,329	07/01/85 06/30/87	Potyvirus and Cucumvirus Interaction with Forage Legumes	SAES
Univ. of Florida Gainesville, FL 32611	Dean F. Davis	83-CRSR-2-2080 8600635	$30,000	01/01/83 12/31/86	CBAG Management Grant for Tropical and Subtropical Agriculture	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: TROPICAL & SUBTROPICAL RESEARCH
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Florida Gainesville, FL 32611	Dean F. Davis	83-CRSR-2-2080 8603171	$30,000	01/01/83 12/31/87	CGAB Management Grant for Tropical and Subtropical Agriculture	SAES
Univ. of Florida Gainesville, FL 32611	Dewayne L. Ingram	84-CRSR-2-2482 8602519	$27,350	07/01/84 06/30/87	Heat Stress of Fruit Trees and Ornamental Plants in the Virgin Islands	SAES
Univ. of Florida Gainesville, FL 32611	Donald L. Hopkins	85-CRSR-2-2575 8602518	$24,030	07/01/85 06/30/87	Role of Plant Growth Regulators and Xylem-Limited Bacteria in Citrus Blight	SAES
Univ. of Florida Gainesville, FL 32611	E. Hiebert	84-CRSR-2-2481 8602515	$34,555	07/01/84 06/30/87	Identification and Characterization of Geminiviruses Occuring in the Caribbean Basin	SAES
Univ. of Florida Gainesville, FL 32611	Forrest W. Howard	85-CRSR-2-2574 8602513	$35,980	07/01/85 06/30/87	Biology and Ecology of the Coconut Mite, Aceria guerreronis	SAES
Univ. of Florida Gainesville, FL 32611	Guy H. Palmer	96-CRSR-2-2842 8602500	$45,933	07/01/86 06/30/87	Development of a Subunit Diagnostic Test for Bovine Babesiosis	Land Grant-1862

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Univ. of Florida Gainesville, FL 32611	Jerry F. Butler	86-CRSR-2-2819 8602495	$34,755	07/01/86 06/30/87	Characterization of Host/Tick Interaction for Vectors of ASF in the Caribbean	Land Grant-1862
Univ. of Florida Gainesville, FL 32611	John T. Neilson	84-CRSR-2-2480 8602520	$44,893	07/01/84 06/30/87	Vaccine Development for Ruminant Anaplasmosis	SAES
Univ. of Florida Gainesville, FL 32611	John W. Scott	84-CRSR-2-2508 8602512	$23,000	07/01/84 06/30/87	Improvement of Tomatoes under High Temperature and Humidity	SAES
Univ. of Florida Gainesville, FL 32611	John W. Scott	86-CRSR-2-2844 8602501	$47,000	07/01/86 06/30/87	Methodology for Developing Multiple Disease Resistant, Heat-tolerant Tomatoes	SAES
Univ. of Florida Gainesville, FL 32611	K. H. Quesenberry	86-CRSR-2-2846 8602492	$58,768	07/01/86 06/30/87	Genetics, Physiology, Ecology, and Utilization of Tropical Forage Legumes	SAES
Univ. of Florida Gainesville, FL 32611	L. Sollenberger	86-CRSR-2-2824 8602499	$12,000	07/01/86 06/30/87	Establishment, Response to Defoliation, and Utilization of N-75 Dwarf Napiergrass	Land Grant-1862

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Univ. of Florida Gainesville, FL 32611	L. W. Timmer	83-CRSR-2-2135 8602494	$42,270	08/01/83 07/31/87	Characterization of Citrus Tree Declines in Florida, Brazil, and Argentina	SAES
Univ. of Florida Gainesville, FL 32611	Laurence H. Purdy	85-CRSR-2-2577 8602514	$16,610	07/01/85 06/30/87	Sugarcane Rust: Physiological Races and Host Responses to Infection	SAES
Univ. of Florida Gainesville, FL 32611	Lee R. McDowell	86-CRSR-2-2843 8602491	$36,725	07/01/86 06/30/87	Mineral Nutrition of Grazing Ruminants in Florida and Caribbean Basin Countries	SAES
Univ. of Florida Gainesville, FL 32611	R. M. Baranowski	86-CRSR-2-2845 8602490	$48,876	07/01/86 06/30/87	Management of Annona Pollinators and Pests	SAES
Univ. of Florida Gainesville, FL 32611	R. M. Giblin-Davis	86-CRSR-2-2841 8602489	$38,882	07/01/86 06/30/87	Culture and Biology of Red Ring Nematode and Evaluation of Host-palm Resistance	SAES
Univ. of Florida Gainesville, FL 32611	Ronald H. Cherry	85-CRSR-2-2572 8602511	$28,326	07/01/85 06/30/87	Impact of *Bacillus popilliae* on Florida Sugarcane Grubs	SAES

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Univ. of Florida Gainesville, FL 32611	W. F. Brown	86-CRSR-2-2823 8602498	$41,320	07/01/86 06/30/87	Managing the Plant-Animal Interface in Tropical Legume-Grass Pastures	Land Grant-1862
Univ. of Florida Gainesville, FL 32611	Wayne B. Sherman	86-CRSR-2-2822 8602497	$20,000	07/01/86 06/30/87	Low-Chill Prunus Cultivar Improvement for the Subtropics and Tropical Highlands	Land Grant-1862
Agricultural Expt. Stn. Univ. of Guam Mangilao, GU 96913	C. T. Tseng	84-CRSR-2-2462 8602378	$17,500	07/01/84 06/30/87	Developing Crop Models for Cassava, Corn, and Papaya on Guam	SAES
Agricultural Expt. Stn. Univ. of Guam Mangilao, GU 96923	Chin-Han Lee	85-CRSR-2-2706 8602419	$31,500	08/01/85 07/31/87	Promote Flowering and Dwarfing of Winged Bean with Plant Growth Regulators	SAES
Agricultural Expt. Stn. Univ. of Guam Mangilao, GU 96923	Claron Bjork	83-CRSR-2-2291 8602418	$38,000	07/01/83 09/30/87	The Biological Control of Chromolaena Odorata (L.) K. and R.	SAES
Agricultural Expt. Stn. Univ. of Guam Mangilao, GU 96923	R. Rajendran	83-CRSR-2-2246 8602420	$26,000	08/01/83 07/31/87	Effect of Cultural Practices on Disease Incidence and Severity on Bell Peppers	SAES

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Agricultural Expt. Stn. Univ. of Guam Mangilao, GU 96923	Victor T. Artero	86-CRSR-2-2825 8602600	$15,000	08/01/86 07/31/87	Evaluation of Produce Market Potential and Production Constraints in Micronesia	SAES
Agricultural Expt. Stn. Univ. of Guam Mangilao, GU 96913	Jose A. Cruz	84-CRSR-2-2461 8602377	$47,600	07/01/84 06/30/87	Potential of Potato in Guam, Saipan, and other Micronesian Islands	SAES
Univ. of Guam Mangilao, GU 96923	I. H. Schreiner	86-CRSR-2-2840 8603038	$39,330	07/01/86 09/30/87	Biology and Control of Mango Shoot Moth and Mango Blotch Miner on Guam	Land Grant-1862
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Duane Bartholomew	83-CRSR-2-2312 8602481	$26,560	08/01/83 07/31/87	Prediction of Crop Performance from Climate-Growth Relationships	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Arlo W. Fast	85-CRSR-2-2660 8602476	$25,000	08/01/85 07/31/87	Development of Spawning Induction and Culture Techniques for the Chinese Catfish	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Bruce Tabashnik	85-CRSR-2-2633 8602422	$29,852	07/01/85 06/30/87	Computer-aided Management of Insecticide in Tropical Pests	SAES

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Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	C. L. Chia	86-CRSR-2-2818 8602603	$52,437	07/01/86 12/31/87	Papaya Management Expert System	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	C. Womersly	85-CRSR-2-2654 8602395	$31,280	08/01/85 07/31/87	Fundamental and Applied Aspects of Anhydrobiosis in the Reinform Nematode Rotylenchulus Reniformis	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Chung-ShihTang	83-CRSR-2-2293 8602423	$44,854	07/01/83 06/30/87	Allelopathy of Tropical Weeds	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Eduardo Trujillo	84-CRSR-2-2454 8602389	$31,000	07/01/84 06/30/87	Biological Control of Exotic Weeds of the Pacific Basin with Plant Pathogens	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Edward P. Caswell	86-CRSR-2-2826 8602601	$42,711	07/01/86 06/30/87	Genetic Variation in Mitochondrial DNA's Among Geographic Populations of Rotylenchulus reniformis	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Franklin Chang	85-CRSR-2-2652 8602475	$31,874	08/01/85 07/31/87	Mode of Action of the Benzodioxoles on Oocyte Development in the Medfly	SAES

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Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	H. Y. Yamamoto	85-CRSR-2-2655 8602474	$40,573	08/01/85 07/31/87	Chemistry and Physiology of Rancidity Development in Tropical Nuts and Oils	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	H. M. Harrington	86-CRSR-2-2828 8602598	$48,976	07/01/86 06/30/87	The Molecular Basis of Heat Tolerance in Tropical Plants	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	James R. Carpenter	83-CRSR-2-2289 8602424	$50,000	07/01/83 06/30/87	Nutritional Limitations and Management Strategies for Wet-Fibrous Tropical Feeds	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	John I. Stiles	84-CRSR-2-2385 8602421	$50,000	07/01/84 06/30/87	Characterization of the Maize Genome: Sequences Coding for Specific Genes	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Joseph DeFrank	85-CRSR-2-2656 8602477	$38,989	08/01/85 07/31/87	Identification/Characterization of Living Mulches for Nematode Suppression in Cropping Systems	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Kathleen K. Wilson	84-CRSR-2-2379 8602471	$12,600	07/01/84 06/30/87	Organization, Management and Performance-Effectiveness of HITAHR Research Units	SAES

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Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	M. Habte	83-CRSR-2-2299 8602428	$9,460	07/01/83 06/30/87	Rhizobium-Soil Erosion Interaction in Highly Weathered Tropical Soils	SAES
Hawaii Inst of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Ping Sun Leung	85-CRSR-2-2658 8602425	$14,610	08/01/85 07/31/87	A Bio-economic Analysis of Marine Shrimp Farming in Hawaii and Guam	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	R. C. Jones	83-CRSR-2-2133 8602473	$22,000	06/01/83 08/31/87	A Correlation of Phosphorus and Sulfur Utilization Efficiencies with Specific Mineral Properties of Tropical Soils	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Richard Manshardt	85-CRSR-2-2653 8602426	$23,328	08/01/85 07/31/87	Identification and Characterization of Phytophthora Blight Resistance in Papaya	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Richard E. Green	85-CRSR-2-2657 8602392	$26,094	08/01/85 07/31/87	Matching Drip-Irrigation System Design and Operation to Soil Hydraulic Properties	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Robert E. Paull	86-CRSR-2-2830 8602595	$54,679	07/01/86 06/30/87	The Development of Chilling Injury: The Role of Protein Turnover	SAES

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Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Robert R. Coltman	84-CRSR-2-2400 8602478	$30,656	07/01/84 06/30/87	Sap Analysis as a Guide to Efficient Fertilization of Tropical Vegetable Crops	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Ronald F. L. Mau	86-CRSR-2-2827 8602599	$61,882	07/01/86 06/30/87	Biological Analysis of Thrips Palmi in the Pacific Basin	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Russell Yost	84-CRSR-2-2478 8602479	$64,789	07/01/84 06/30/87	Predicting the Response of Crops to Inoculation with Mycorrhizal Fungi	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Ryoji Namba	84-CRSR-2-2384 8602427	$22,691	07/01/84 06/30/87	Control of Papaya Ringspot and Citrus Tristeza	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	S. A. El-Swaify	83-CRSR-2-2296 8602480	$75,870	07/01/83 06/30/87	Rainfall Erosion Parameters and Impacts on Soil Productivity	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Thomas L. German	86-CRSR-2-2829 8602597	$40,900	07/01/86 06/30/87	Characterization of the Tomato Spotted Wilt Virus Genome	SAES

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Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Wallace Mitchell	83-CRSR-2-2290 8602394	$18,000	07/01/83 12/31/87	Integrated Pest Management of Cabbage and Lettuce	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Wen-hsiung Ko	85-CRSR-2-2661 8602393	$35,197	08/01/85 07/31/87	Nature of Sexual Reproduction in Phytophthora of Tropical Crops	SAES
Hawaii Inst. of Tropicl Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	I-pai Wu	83-CRSR-2-2298 8602390	$17,328	07/01/83 06/30/87	Deficit Irrigation for Tropical Vegetable Crops	SAES
Univ. of Hawaii Hawaii Inst. of Tropical Agric. & Human Resources Honolulu, HI 96822	Richard Manshardt	83-CRSR-2-2297 8602472	$13,400	07/01/83 06/30/87	Breeding Papayas Resistant to Viral Diseases Through Interspecific Hybridization	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	D. L. Vincent	86-CRSR-2-2817 8602602	$54,163	07/01/86 06/30/87	Management Strategies to Prevent Delayed Puberty in Cattle in Subtropical Areas	SAES
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	James A. Silva	84-CRSR-2-2386 8602388	$33,068	07/01/84 06/30/87	Prediction of Maximun Yields of Sugarcane with Growth Simulation Models	SAES

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Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Ping-Yi Yang	84-CRSR-2-2387 8602391	$19,273	07/01/84 06/30/87	A Potential Management Alternative for Highly-Diluted Swine Wastewater in the Tropics	SAES
Louisiana State Univ. & A&M College Baton Rouge, LA 70803	Charles M. Smith	85-CRSR-2-2621 8602387	$31,500	07/01/85 06/30/87	Varietal Resistance to Insect Pests of Rice in the Caribbean Basin	SAES
Agricultural Expt. Stn. Mayaguez, PR 00708	Nelia Acosta	85-CRSR-2-2663 8602470	$42,000	07/15/85 07/31/87	Improvement of Vegetable Production Through Integrated Nematode Management	SAES
Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	Alberto Pantoja	85-CRSR-2-2665 8602465	$27,000	07/15/85 07/31/87	Varietal Resistance to Insect Pests of Rice in the Caribbean Basin	SAES
Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	Arturo Maldonado	85-CRSR-2-2667 8602468	$31,018	07/15/85 07/31/87	Improvement of the Yield and Nutritive Value of Edible Aroids with New Techniques	SAES
Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	Eduardo Cacho	84-CRSR-2-2471 8602464	$50,132	07/01/84 06/30/87	Production and Quality Evaluation of Wines from Grapes Grown in Puerto Rico	SAES

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Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	Hector M. Lugo	85-CRSR-2-2662 8602469	$34,924	07/01/85 06/30/87	Control of "Mal Seco" in Taniers Through Crop and Soil Management Practices	SAES
Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	James S. Beaver	86-CRSR-2-2811 8602483	$22,450	07/01/86 06/30/87	Comparison of Three Selection Methods for Large Seeded Dry Beans in the Tropics	SAES
Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	John M. Kubaryk	84-CRSR-2-2470 8602467	$10,250	07/01/84 06/30/87	Feed Formulation to Satisfy the Amino Acid Requirements of Tilapia nilotica	SAES
Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	Julio Bird	84-CRSR-2-2469 8602463	$45,000	07/01/84 06/30/87	Virus Disease of Taniers in the Caribbean Basin	SAES
Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	Julio Bird	86-CRSR-2-2812 8602484	$30,000	07/01/86 06/30/87	Virus Diseases of Passion Fruit (Passion edulis) in Puerto Rico and the Dominican Republic	SAES
Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	Lii-Jang Liu	86-CRSR-2-2813 8602485	$35,000	07/01/86 06/30/87	Selection of Pineapple Varieties Resistant to Diseases and Pest Via Somaclonal Variation	SAES

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Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	Linda W. Beaver	84-CRSR-2-2468 8602462	$25,409	07/01/84 06/30/87	Improvement of Tomatoes Under High Temperatures and Humidity	SAES
Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	Linda Wessel-Beaver	86-CRSR-2-2810 8602482	$19,500	07/01/86 06/30/87	Collection and Evaluation of *Cucurbita moschata* Accessions from Puerto Rico and the Dominican Republic	SAES
Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	Megh R. Goyal	85-CRSR-2-2664 86024[illegible]	$33,974	07/15/85 07/31/87	Irrigation Requirement Estimations in Puerto Rico	SAES
Agricultural Expt. Stn. Univ. of Puerto Rico Mayaguez, PR 00708	Ruben S. Luna	85-CRSR-2-2666 8602461	$51,500	07/15/85 07/31/87	Postharvest Technology of Tropical Fruits and Vegetables Produced in Puerto Rico	SAES
Agricultural Expt. Stn. College of the Virgin Islands Kingshill, St. Croix, VI 00850	Stephan Wildeus	86-CRSR-2-2816 8602488	$48,685	07/01/86 06/30/87	Evaluation of the Reproductive Potential of Tropical Virgin Islands White Sheep	SAES

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Agricultural Expt. Stn. College of the Virgin Islands Kingshill, St. Croix, VI 00850	Kenneth E. Green	86-CRSR-2-2815 8602487	$48,113	07/01/86 06/30/87	Marketing Island Farm Produce: Assessing New Product and Trade Potentials	SAES
Agricultural Expt. Stn. College of the Virgin Islands Kingshill, St. Croix, VI 00850	M. W. Michaud	86-CRSR-2-2814 8602486	$35,945	07/01/86 06/30/87	To Develop Agronomic Techniques to Improve Sward Establishment in the Caribbean	SAES

TOTAL $2,930,268

PROGRAM AREA: DAIRY GOAT RESEARCH

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Prairie View A&M Univ. Prairie View, TX 77446-2886	Louis C. Nuti	86-CRSR-2-2920 8602292	$90,060	09/01/86 04/30/88	The Use of Gene Transfer to Improve Caprine Genetics	Land Grant-1890

TOTAL $90,060

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Univ. of Hawaii Honolulu, HI 96822	T. Liang	83-CRSR-2-2152 8602822	$134,616	07/01/83 08/31/87	A Comprehensive Methodology for Identifying Alternative Crops for Hawaii	SAES
		TOTAL	$134,616			

PROGRAM AREA: POTATO RESEARCH

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Idaho Agricultural Expt. Stn. Univ. of Idaho Moscow, ID 83843	Stephen L. Love	84-CRSR-2-2360 8602308	$60,357	04/15/84 04/30/87	Potato Development and Improvement in the Northwest	SAES
Univ. of Maryland College Park, MD 20742	Theo Solomos	84-CRSR-2-2361 8601324	$18,650	05/01/84 04/30/87	Roles of ATP-and Pyrophosphate - Phosphofructoskinases in the Selection of Potato Tubers stored at 1 Degree C.	Land Grant-1862
Univ. of Maine Orono, ME 04469	Stellos M. Tavantzis	86-CRSR-2-2762 8601428	$54,407	04/15/86 10/31/87	Genetic Improvement of Potato: Incorporation of Extreme Resistance to Potato Virus X	SAES
Michigan State Univ. East Lansing, MI 48824	Richard W. Chase	85-CRSR-2-2562 8602329	$180,357	05/01/85 09/30/87	Improved Production and Utilization Technology for Michigan Potatoes	SAES
Agricultural Expt. Stn. North Dakota State Univ. Fargo, ND 58105	N. C. Gudmestad	86-CRSR-2-2764 8601427	$180,357	07/01/86 06/30/88	Alternative Approaches to Potato Ring Rot Research and Varietal Improvement	SAES

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ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Cornell Univ. Ithaca, NY 14853	R. L. Plaisted	83-CRSR-2-2123 8601323	$53,650	05/01/83 04/30/87	The Development of Potato Varieties Adapted to Eastern U.S.	SAES
Oregon State Univ. Corvallis, OR 97331	Alvin R. Mosley	84-CRSR-2-2397 8601700	$60,000	06/01/84 09/30/87	Potato Varietal Development in Oregon	SAES
Pennsylvania State Univ. University Park, PA 16802	Barbara J. Christ	85-CRSR-2-2543 8601094	$53,650	03/15/85 03/31/87	Breeding and Evaluation of Russet Potatoes for Production in the Eastern U.S.A.	SAES
Washington State Univ. Pullman, WA 99164	W. M. Iritani	84-CRSR-2-2352 8602178	$60,000	03/15/84 09/30/87	Western Regional Potato Variety Development and Improvement	SAES

TOTAL $721,428

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: ASPARAGUS YIELD DECLINE, MI
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Michigan State Univ. East Lansing, MI 48824	Christine Stephens	84-CRSR-2-2353 8602181	$90,060	03/15/84 03/31/87	Asparagus Decline Syndrome and Replant Problem in Michigan	SAES
		TOTAL	$90,060			

PROGRAM AREA: INTEGRATED PRODUCTION SYSTEMS, OK

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Oklahoma State Univ. Stillwater, OK 74078	Larry J. Littlefield	86-CRSR-2-2765 8601804	$225,624	05/01/86 04/30/89	Disease and Insect Control for Horticultural Crops and Christmas Trees in S.E. Oklahoma	SAES
		TOTAL	$225,624			

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: PRESERVATION & PROCESSING RESEARCH, OK
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Oklahoma State Univ. Stillwater, OK 74078	David W. Buchanan	86-CRSR-2-2763 8601803	$134,616	07/01/86 06/30/88	Postharvest Treatments to Delay Vegetable and Fruit Deterioration	SAES

TOTAL $134,616

PROGRAM AREA: BIOCONTROL OF GRASSHOPPERS, KS

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Kansas State Univ. Manhattan, KS 66506	William A. Ramoska	84-CRSR-2-2345 8601695	$45,504	02/01/84 07/31/87	Development of *Entomophaga grylli* for Biological Control of Grasshoppers	SAES

TOTAL $45,504

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: WOOL RESEARCH, TX
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Agricultural Expt. Stn. Texas A&M Univ. College Station, TX 77843	Christopher Lupton	85-CRSR-2-2550 8601148	$134,616	09/01/85 08/31/87	Research With Wool and Mohair	SAES

TOTAL $134,616

PROGRAM AREA: AGRICULTURE POLICY INSTITUTE, MO/IA

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Iowa State Univ. of Science & Technology Ames, IA 50011	William H. Meyers	84-CRSR-2-2377 8602346	$169,218	04/01/84 06/30/87	Food and Agricultural Policy Research Institute at Iowa State University	SAES
Univ. of Missouri Columbia, MO 65211	Abner W. Womack	84-CRSR-2-2376 8602368	$169,218	04/01/84 06/30/87	Agriculture Policy Institute, MO/IA	SAES

TOTAL $338,436

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: BIOMASS FROM DAIRY PROCESSING WASTE, MO
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Missouri Columbia, MO 65211	James E. Williams	85-CRSR-2-2548 8603039	$270,180	04/01/85 06/30/87	Evaluation of Biomass as a Feed Ingredient and for Land Application	SAES

TOTAL $270,180

PROGRAM AREA: STONE FRUIT DECLINE, MI

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Michigan State Univ. East Lansing, MI 48824	James A. Flore	85-CRSR-2-2551 8602375	$270,180	04/01/85 09/30/87	Factors Causing Tree Decline and Reduced Production of Cherry, Peach, and Plum Trees Under Michigan Climatic Conditions	SAES

TOTAL $270,180

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: EDB REPLACEMENT, HI
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Hawaii Inst. of Tropical Agric. & Human Resources Univ. of Hawaii Honolulu, HI 96822	Chian L. Chia	85-CRSR-2-2570 8603159	$270,180	07/01/85 06/30/89	Program of Papaya Postharvest Handling and Pest Control	SAES

TOTAL $270,180

PROGRAM AREA: INTEGRATED REPRODUCTION MANAGEMENT, NE

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Agricultural Expt. Stn. Univ. of Nebraska Lincoln, NE 68583	Rodger K. Johnson	85-CRSR-2-2547 8602558	$27,360	03/15/85 12/31/87	Estimation of Breeding Values of Reproductive and Other Performance Traits in Swine	SAES
Agricultural Expt. Stn. Univ. of Nebraska Lincoln, NE 68588	James E. Kinder	85-CRSR-2-2546 8602559	$62,700	03/15/85 09/30/87	Evaluation of Management Practices and Traits that Influence Reproductive Efficiency	SAES

TOTAL $90,060

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: CRANBERRY/BLUEBERRY DIS. & BREEDING, NJ
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
New Jersey Agricultural Expt. Stn. Rutgers, The State Univ. P.O. Box 231 New Brunswick, NJ 08903	Robert F. Davis	85-CRSR-2-2540 8601430	$90,060	02/15/85 02/28/87	Sheep Pen Hill and Red Ringspot Diseases of Blueberry and Their Control	SAES

TOTAL $90,060

PROGRAM AREA: ALTERNATIVE CROPPING SYSTEMS IN SE

Clemson Univ. Clemson, SC 29634	J. E. Faris	85-CRSR-2-2541 8601701	$270,180	03/01/85 02/29/88	Agricultural Adjustment in the Southeast through Alternative Cropping Systems	Land Grant-1862

TOTAL $270,180

PROGRAM AREA: MAPLE RESEARCH, VT

Univ. of Vermont & State Agricultural College Burlington, VT 05405	Melvin T. Tyree	85-CRSR-2-2564 8601284	$90,060	06/01/85 05/31/88	Water Stress Physiology of Maple Trees	SAES

TOTAL $90,060

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: WOOD UTILIZATION
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Auburn Univ. Auburn University, AL 36849	Thomas J. Elder	86-CRSR-2-2940 8603185	$60,000	09/15/86 09/30/87	Bonding Surface Activated Hardwood Flakeboard with Phenol-formaldehyde Resins	Land Grant-1862
Univ. of Kentucky Lexington, KY 40546-0073	Sun J. Chang	86-CRSR-2-2941 8603188	$49,000	09/15/86 09/30/87	NMR Imaging of Eastern Hardwoods	SAES
Michigan State Univ. East Lansing, MI 48824	H. A. Huber	86-CRSR-2-2934 8603174	$310,000	09/01/86 09/30/89	Technology Applications to Eastern Hardwoods	SAES
Michigan State Univ. East Lansing, MI 48824	James W. Hanover	85-CRSR-2-2604 8602350	$90,123	06/15/85 06/30/88	Chemistry, Preservation Potential and Utilization of Secondary Metabolites from Black Locust and Other Northern Hardwoods	SAES
Univ. of Minnesota St. Paul, MN 55104	Robert W. Erickson	86-CRSR-2-2942 8603193	$45,000	09/15/86 09/30/88	Batch Venting for Hardwood Lumber Drying...Effects on Energy Use, Drying Rate, and Wood Quality	Land Grant-1862
Agricultural & Forestry Expt. Stn. Mississippi State Univ. Mississippi State, MS 39762	Warren S. Thompson	85-CRSR-2-2553 8602351	$901,232	04/01/85 03/31/87	Wood Utilization Research Program	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: WOOD UTILIZATION
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Mississippi Forest Products Utilization Laboratory Mississippi State Univ. Mississippi State, MS 39762	Fred W. Taylor	86-CRSR-2-2938 8603199	$44,000	09/15/86 03/31/88	Lumber Grade Improvement by Computer Selection of Best Log Orient	Land Grant-1862
North Carolina State Univ. Raleigh, NC 27695	Awatif E. Hassan	86-CRSR-2-2943 8603203	$45,000	09/15/86 03/31/88	A Study of Systems for Harvesting Oak Gum Bottom Land Hardwood	Land Grant-1862
Oregon State Univ. Corvallis, OR 97331	Charles C. Brunner	86-CRSR-2-2939 8603211	$43,109	09/15/86 09/30/88	Extension of Program CORY's Algorithm to Alternative Lumber Cut-Up Models	Land Grant-1862
Oregon State Univ. Corvallis, OR 97331	Helmuth Resch	85-CRSR-2-2555 8602566	$901,232	05/01/85 04/30/89	Center of Wood Utilization Research	SAES
Pennsylvania State Univ. University Park, PA 16802	Paul R. Blankenhorn	86-CRSR-2-2944 8603216	$60,000	09/15/86 09/30/87	Pretreatment of Dense and/or Impermeable Hardwood Flakes for Flakeboard Manufacturing	Land Grant-1862
Virginia Polytechnic Inst. & State Univ. Blacksburg, VA 23061	Robert L. Youngs	86-CRSR-2-2947 8603222	$50,000	09/15/86 09/30/88	Determination of Drying Stresses in Red Oak as Related to the Onset of Surface Checking	SAES

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: WOOD UTILIZATION
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Wisconsin Madison, WI 53706	Joseph Buongiorno	86-CRSR-2-2946 8603184	$55,000	09/15/86 09/30/89	Optimum Harvesting of Uneven-Aged Eastern Hardwood Stands	Land Grant-1862
West Virginia Univ. Morgantown, WV 26506-6125	James P. Armstrong	86-CRSR-2-2945 8603179	$50,000	09/15/86 03/31/88	A Nondestructive Test for Evaluating Bond Quality in Edge-Glued Hardwood Panels	Land Grant-1862

TOTAL $2,703,696

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: APPLE QUALITY RESEARCH, MI
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Michigan State Univ. East Lansing, MI 48824	Jack Kelly	86-CRSR-2-2766 8602203	$90,060	04/15/86 04/30/87	Apple Quality Improvement Through Production, Storage and Distribution Technology	SAES
		TOTAL	$90,060			

PROGRAM AREA: AQUACULTURE PLANNING GRANT, HI

College of Tropical Agriculture & Human Resources Univ. of Hawaii 3050 Maile Way Honolulu, HI 96822	Chauncey Ching	86-CRSR-2-2793 8602349	$134,616	04/15/86 04/30/87	Assessment of Aquaculture Practices in Hawaii	SAES
		TOTAL	$134,616			

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: FRUIT & VEGETABLE PRODUCTION & MARKETING, KY
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Kentucky Res. Fdn. Lexington, KY 40506	John C. Synder	86-CRSR-2-2864 8603059	$134,616	09/01/86 08/31/87	Design of Production and Marketing Systems for Fruits and Vegetables in Kentucky	Land Grant-1862
		TOTAL	$134,616			

PROGRAM AREA: PLANT STRESS, NM, CA & TX

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
New Mexico State Univ. Las Cruces, NM 88003	John D. Kemp	86-CRSR-2-2748 8601296	$270,180	03/01/86 09/30/87	Southwest Plant Genetics/Water Resources Consortium	SAES
		TOTAL	$270,180			

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: MILK CONSUMPTION, PA
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Pennsylvania State Univ. University Park, PA 16802	R. H. Warland	86-CRSR-2-2802 8602204	$270,180	06/01/86 06/30/88	Milk Consumption: Role of (a) Market Expansion and (b) Anti Cancer Potential	Land Grant-1862
		TOTAL	$270,180			

PROGRAM AREA: INTERNATIONAL LIVESTOCK PROGRAM, KS

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Kansas State Univ. Manhattan, KS 66506	Don L. Good	86-CRSR-2-2896 8602384	$90,060	08/15/86 10/31/87	International Livestock Program - International Trade Development	SAES
		TOTAL	$90,060			

SPECIAL RESEARCH GRANTS PROGRAM
PROGRAM AREA: STORED GRAIN INSECTS, KS
PUBLIC LAW 89-106
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Kansas State Univ. Manhattan, KS 66506	R. B. Mills	86-CRSR-2-2754 8601075	$270,180	04/01/86 03/31/87	Management of Stored-Grain Insect Problems	SAES
		TOTAL	$270,180			
PROGRAM AREA: FT. STANTON EXPT. STN. RELOCATION, NM						
New Mexico State Univ. Agricultural Expt. Stn. P.O. Box 3BF Las Cruces, NM 88003	John C. Owens	86-CRSR-2-2948 8603234	$1,137,600	09/15/86 09/30/91	Relocation of the Fort Stanton Experimental Ranch Grazing Research Facilities	SAES
		TOTAL	$1,137,600			

COOPERATIVE STATE RESEARCH SERVICE
PROGRAM AREA: CRITICAL AGRICULTURE MATERIALS ACT
PUBLIC LAW 95-592
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Arizona Tucson, AZ 85721	S. M. Alcorn	86-CRSR-2-2755 8601844	$130,734	06/01/86 05/31/87	Research and Development of Guayule as a Crop in Arizona and the Southwest	SAES
Univ. of California Riverside, CA 92521	J. Giles Waines	86-CRSR-2-2834 8601005	$203,250	07/01/86 06/30/87	Guayule Breeding and Development	SAES
Univ. of Southern Mississippi Hattiesburg, MS 39406	Gordon L. Nelson	86-CRSR-2-2804 8602281	$454,991	06/15/86 06/30/87	Planning a Critical Agricultural Materials Research Facility	Public Univ/College
New Mexico State Univ. Las Cruces, NM 88003	James L. Fowler	86-CRSR-2-2794 8601007	$52,524	06/01/86 05/31/87	Guayule Studies in New Mexico: Root Development, Direct Seeding, Shrub Production, and Testing	SAES
Texas A&M Res. Fdn. College Station, TX 77843	Jaroy P. Moore	86-CRSR-2-2756 8601004	$253,352	04/15/86 04/30/87	Integrated Research Program for Guayule in Texas	SAES

TOTAL $1,094,851

COOPERATIVE STATE RESEARCH SERVICE
PROGRAM AREA: RANGELAND RESEARCH PROGRAM
PUBLIC LAW 95-113
GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE	
Univ. of Arizona Tucson, AZ 85721	B. A. Roundy	86-CRSR-2-2924 8602959	$79,454	09/15/86 09/30/89	Modification of Surface Soils by Livestock to Enhance Revegetation of Southwestern Rangelands	Public Univ/College
Univ. of California Davis, CA 95616	J. W. Menke	86-CRSR-2-2922 8603014	$77,000	09/15/86 09/30/89	Ecological Limitations to Sustained Production on Woodland and Savanna Ranges	Land Grant-1862
Agricultural Expt. Stn. Texas A&M Univ. College Station, TX 77843	J. W. Stuth	86-CRSR-2-2923 8602954	$79,615	09/15/86 09/30/88	Strategic Planning Model for Integrated Range Management Systems	SAES
Agricultural Expt. Stn. Texas A&M Univ. College Station, TX 77843	C. J. Scifres	86-CRSR-2-2925 8602965	$79,456	09/15/86 09/30/89	Succession on Mixed Shrublands: An Ecological Basis for a Working Bionomic Model	SAES
Texas Tech Univ. Lubbock, TX 79409	D. E. Ethridge	86-CRSR-2-2926 8602994	$62,466	09/15/86 09/30/88	Alternative Production/Marketing Systems for Southwestern Cattle Ranches	Public Univ/College
Utah State Univ. Logan, UT 84322	Douglas A. Johnson	86-CRSR-2-2921 8602996	$77,000	09/15/86 09/30/88	Stable Isotope Composition: Potential for Screening Range Forages	SAES

TOTAL $454,991

SELECTED SPECIAL RESEARCH GRANT PROJECTS

Question: Please provide the committee with an explanation of the peer review process that special research grants awards must undergo before final approval.

Answer: The review of special research grants designated for a specific location may go through a peer review at the institution or a review may be arranged by the Cooperative State Research Service --CSRS--. Those which are multi-state and awarded competitively are evaluated by peer review groups organized by CSRS or supervised by CSRS. Peer reviewers are selected based upon their training and experience in relevant scientific and technical fields. Care is taken to avoid any possible conflict of interest in the selection of peer reviewers. The proposals are evaluated and scored objectively by the reviewers in accordance with the criteria specified in the Special Research Grants program administrative provisions which were published in the February 8, 1985, Federal Register. The evaluation criteria used are:

1. Scientific and technical quality of the idea.
2. Scientific and technological quality of the approach.
3. Relevance and importance of proposed research to solution of specific area of inquiry.
4. Feasibility of attaining objectives during life of proposed research.
5. Adequacy of professional training or research experience of research team in essential disciplines needed to conduct proposed research.
6. Adequacy of facilities, equipment, and professional and technical staffing.

The reviewers also provide written comments as appropriate.

COMPETITIVE GRANT AWARDS

Question: In Fiscal Year 1986, a large portion of the Competitive Research Grants that were awarded focused on biotechnology and plant biology. Out of 415 grants awarded, 331 were for these two purposes. How many competitive grants in biotechnology during the first two quarters of this fiscal year were awarded?

Answer: No grants were awarded in Biotechnology during the first two quarters of FY 1986. This is because the deadlines for receipt of proposals ranged from November 4, 1985, to March 3, 1986, in that fiscal year and proposal review typically requires six months. In this time frame, it was not possible to award grants during the first two quarters.

Question: How many competitive research grants have been awarded in plant biology to date?

Answer: From FY 1978 to FY 1986, a total of 1,606 grants were awarded in plant biology.

Question: Why have these two research areas received such high priority among research scientists in recent years?

Answer: Exciting opportunities in biotechnology and increased emphasis in Federal funding on plant biology in recent years can be cited as primary reasons for the recent increase in research activities in plant biology and biotechnology.

Traditionally, scientists are drawn to the areas where research funds are available on a constant basis and where probabilities for significant scientific contributions are high. Our knowledge of the basic biology of plant systems is relatively primitive compared to that of animal and microbial systems. However, with the advancement of research techniques, particularly in biotechnology, basic plant biology is presenting a whole new challenge to the scientific community. The establishment of the Competitive Research Grants program combined with the emphasis on plant biology in other Federal funding agencies has encouraged more scientists to carry out research in plant biology. Increased activities by private agribusiness in plant biotechnology in recent years have contributed to the placement of plant biology and biotechnology as high priority research areas.

COMPETITIVE RESEARCH GRANTS - PLANT SCIENCE

Question: The fiscal year 1988 budget proposes an increase of $3.3 million for plant science competitive grants. Please explain the purpose of this funding.

Answer: Historically, the plant science Competitive Research Grants program has been funded at approximately $15 million per year. Because of financial constraints, the program has been reduced, by Gramm-Rudman-Hollings actions and by the Appropriations Act. The Department of Agriculture is the principal Federal agency in which plant science research is conducted and this is a particularly significant part of the Department's effort.

One aspect of plant science competitive research grants is the Plant Science Initiative. The Department of Agriculture --USDA, the Department of Energy and the National Science Foundation --NSF-- have jointly proposed an initiative for plant science research centers patterned after the NSF's effort in engineering research centers. These are to be intellectual centers, not specific geographic centers; thus a "center" may involve several institutions. For fiscal year 1988, the cooperative proposal is very modest, totaling $10 million to be shared by the three agencies equally.

The plan for the plant sciences centers initiative is to jointly call for proposals --that is, all three Departments working together; to receive the proposals at a single location -- probably the National Science Foundation but it could be USDA; to review all of the proposals with a cooperatively chosen panel; to select the best proposals based upon scientific merit; and then to assign the successful proposals to the most appropriate Department. The plant sciences centers initiative will focus on basic research in the plant sciences, particularly economically significant plants, with special emphasis on agriculture. Specifically the following areas of thrust are envisioned: rhizosphere dynamics and microbial ecology, plant biotechnology, complex carbohydrates and ecological processes.

SPECIAL RESEARCH AND COMPETITIVE RESEARCH GRANTS

(GENERAL)

In a similar fashion to last years's proposed budget, USDA seeks to eliminate funding for Special Research Grants and slightly increase certain areas of Competitive Research Grant Programs. In the Special Research Grant area, over $28 million of funding for some 50 current programs is proposed for termination in fiscal year 1988. In the Competitive Research Grants, although an increase of $3.8 million is requested in the coming fiscal year, funding for ongoing basic research in plant science, pest science, and animal science is slated for elimination. Please respond, if you will, to a few questions on these areas of research:

COMPETITIVE GRANTS

Question: What is the duration of Competitive Research Grants generally?

Answer: The average duration for Competitive Research Grants is two years.

Question: How was the determination made to discontinue funding for ongoing earmarked research projects such as soybean research, brucellosis, the gypsy moth, and boll weevil?

Answer: It was decided to discontinue earmarking research projects because much of the research could be carried out within other more general areas of the Competitive Research Grants Program as well as other CSRS formula funded programs.

Question: Are these projects completed, or do you expect that they should be absorbed by other funding sources?

Answer: The earmarked research grants funded in fiscal year 1987 and prior years will be used over a period of up to five years for completion of the studies proposed in the grants.

Question: If they are to be continued, what specific sources would you expect might provide adequate funding for each?

Answer: The research previously conducted under these earmarked areas in the Competitive Research Grants program may be continued under the provisions of the Hatch Act formula and related base funded programs or the general areas of animal science, plant science or biotechnology within the Competitive Research Grants program. We are proposing increases for the basic formula programs in 1988. The State institutions also receive funds from other Federal and non-Federal sources which could be used for these research areas.

Question: Please provide the subcommittee with a table showing the duration of each of the earmarked competitive grants projects, the objective of each project, and the status of ongoing research.

Answer: The information follows:

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL SCIENCE-BRUCELLOSIS

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE
Louisiana State Univ. Agricultural Center Baton Rouge, LA 70803	Frederick Enright	86-CRCR-1-2208 8601257	$93,300	09/15/86 09/30/88	Interaction of Bovine Macrophages with Brucella abortus
BBN Laboratories Inc. 10 Moulton St. Cambridge, MA 02238	Howard S. Bilofsky	86-CRCR-1-2235 8602202	$10,000	09/15/86 09/30/87	Organization and Annotation of Gene Sequences of Agricultural Importance
Oklahoma State Univ. Stillwater, OK 74078	Richard Essenberg	86-CRCR-1-2209 8601136	$147,000	09/01/86 08/31/89	Nutrient Utilization in Brucella abortus Studied by Cloning the Genes in E. coli
Univ. of Wisconsin Madison, WI 53706	Gary Splitter	86-CRCR-1-2210 8601020	$200,000	09/01/86 08/31/89	T-Lymphocyte-macrophage Interactions to Brucella abortus

TOTAL $450,300

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL SCIENCE-REPRODUCTIVE EFFICIENCY

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE
Univ. of Arizona Tucson, AZ 85721	Mark E. Wise	86-CRCR-1-2123 8601106	$198,081	09/01/86 08/31/89	Regulation of Gonadotropin Secretion during Postpartum Anestrus
Univ. of California Davis, CA 95616	Gary B. Anderson	86-CRCR-1-2152 8601065	$215,000	09/01/86 08/31/88	Development of Lines of Undifferentiated Embryonic Stem Cells from Porcine Embryos
Univ. of California Davis, CA 95616	Robert BonDurant	86-CRCR-1-2187 8601130	$142,400	09/15/86 09/30/88	Diagnostic and Clinical Studies on Bovine Trichomoniasis
Colorado State Univ. Fort Collins, CO 80523	H. Sawyer, Jr.	86-CRCR-1-2127 8601152	$150,000	09/15/86 09/30/88	Hormonal Control of Follicular Growth and Development
Univ. of Florida Gainesville, FL 32611	Fuller W. Bazer	86-CRCR-1-2106 8601062	$220,000	09/01/86 08/31/89	Porcine Conceptus-Endometrial Interactions Affecting Embryonic Survival
Iowa State Univ. of Science & Technology Ames, IA 50011	Lloyd Lee Anderson	86-CRCR-1-2130 8601123	$134,428	09/01/86 08/31/89	Relaxin on Control of Parturition in Cattle

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL SCIENCE-REPRODUCTIVE EFFICIENCY

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE
Univ. of Illinois Urbana, IL 61801	Janice M. Bahr	86-CRCR-1-2124 8601150	$192,000	09/01/86 08/31/88	Endocrine Changes Associated with Molting in the Domestic Hen
Univ. of Illinois Urbana, IL 61801	Philip J. Dziuk	86-CRCR-1-2180 8601087	$44,000	08/15/86 08/31/88	Growth Pattern of the Pig Uterus
Univ. of Missouri Columbia, MO 65211	H. A. Garverick	86-CRCR-1-2137 8601113	$104,547	09/01/86 08/31/88	Etiology, Turnover Rate and Hormone Secretory Dynamics of Ovarian Cysts in Dairy Cattle
Agricultural & Forestry Expt. Stn. Mississippi State Univ. Mississippi State, MS 39762	Nancy M. Cox	86-CRCR-1-2254 8601189	$40,000	09/15/86 09/30/88	Effects of Manipulating Dietary Energy and Metabolic Hormones on Pig Ovulation Rate and Litter Size
Cornell Univ. Ithaca, NY 14853	J. E. Fortune	86-CRCR-1-2125 8601171	$250,000	09/15/86 09/30/89	Ovarian Follicular Development and Function in Cattle: Relative Roles of LH and FSH
Ohio State Univ. Res. Fdn. Columbus, OH 43212	Joy L. Pate	86-CRCR-1-2151 8601125	$82,940	09/01/86 08/31/88	Hormonal and Immunological Aspects of Luteolysis

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: ANIMAL SCIENCE-REPRODUCTIVE EFFICIENCY

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE
Ohio State Univ. Res. Fdn. Columbus, OH 43212	T. G. Ramsay	86-CRCR-1-2126 8601110	$210,000	09/01/86 08/31/88	Development of Lines of Undifferentiated Embryonic Stem Cells from Porcine Embryos
Texas A&M Res. Fdn. College Station, TX 77843	D. W. Forrest	85-CRCR-1-1844 8601225	$35,000	09/15/85 09/30/87	Endocrine Control of Bioactive Lutinizing Hormone during Sexua Maturation
Washington State Univ. Pullman, WA 99164	Thomas E. Besser	86-CRCR-1-2169 8601162	$100,000	09/01/86 08/31/88	Increasing Neonatal Calf Survival: Exploiting a Novel Mechanism of Enteric Immunity
Univ. of Wisconsin Madison, WI 53706	Bernard Wentworth	86-CRCR-1-2255 8601057	$25,000	09/15/86 09/30/87	Ducks Hosting Turkey Primordial Germ Cells as Surrogate Parents of Turkey Poults
West Virginia Univ. Morgantown, WV 26506	Roy L. Butcher	86-CRCR-1-2138 8601039	$110,000	09/01/86 08/31/89	Roles of the Follicle and Oocyte in Conception Rates in Cattle

TOTAL $2,253,396

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: INSECT PEST SCIENCE-BOLL WEEVIL/BOLLWORM

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE
Univ. of California Riverside, CA 92521	Michael E. Adams	86-CRCR-1-2097 8601630	$100,000	09/15/86 09/30/88	Pharmacology of Synaptic Transmission in the Cotton Bollworm, Heliothis virescens
South Atlantic Area ARS, USDA Athens ,GA 30613	James H. Tumlinson	86-CRCR-1-2163 8601480	$145,027	08/15/86 08/31/88	Heliothis and Gypsy Moth Parasitoids: Learning and Semiochemical-Induced Foraging
Central Plains Area ARS, USDA P.O. Box 70, RR #2 Ames, IA 50010	M. H. Greenstone	86-CRCR-1-2051 8601393	$100,000	09/01/86 08/31/88	Species-specific Serological Assays for Diagnosis of Heliothis zea Parasitism
Univ. of Massachusetts Amherst, MA 01003	Ring T. Carde	86-CRCR-1-2164 8601622	$112,521	09/15/86 09/30/88	Heliothis and Gypsy Moth Parasitoids: Learning and Semiochemical Induced Foraging
Univ. of Maryland College Park, MD 20742	Charles Mitter	86-CRCR-1-2113 8601624	$137,000	09/01/86 08/31/89	Biosystematics of Heliothine Pests: Molecular and Morphological Approaches
Univ. of Texas Austin, TX 78712	Mary A. Rankin	86-CRCR-1-2102 8601537	$100,000	09/01/86 08/31/88	Diapause and Migration in Anthonomus grandis

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: INSECT PEST SCIENCE-BOLL WEEVIL/BOLLWORM

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE
Texas A&M Res. Fdn. College Station, TX 77843	S. Bradleigh Vinson	86-CRCR-1-2087 8601294	$127,000	09/01/86 08/31/88	Hormonal Changes Associated with Host/Parasitoid Relationships
Agricultural Expt. Stn. VA Polytechnic Inst. & State Univ. Blacksburg, VA 24061	John L. Eaton	86-CRCR-1-2165 8601464	$80,000	09/01/86 08/31/88	Relationship of Photoreception and Energy Metabolism to Cotton Bollworm Moth Locomotor Activity

TOTAL $901,548

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: INSECT PEST SCIENCE-GYPSY MOTH

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE
Univ. of California Riverside, CA 92521	Tom S. Bellows	86-CRCR-1-2173 8601505	$41,972	08/15/86 08/31/88	New Analytical Methods for Assessing Parasitism Rates in Gypsy Moth Populations
Univ. of Connecticut Storrs, CT 06268	Norman T. Davis	86-CRCR-1-2095 8601621	$100,000	08/01/86 07/31/88	The Functional Neuronanatomy of the Feeding System of Gypsy Moth Larvae
Univ. of Massachusetts Amherst, MA 01003	R. Van Driesche	86-CRCR-1-2171 8601579	$45,576	08/15/86 08/31/88	New Analytical Methods for Assessing Parasitism Rates in Gypsy Moth Populations
Univ. of Massachusetts Amherst, MA 01003	David E. Leonard	86-CRCR-1-2153 8601485	$125,000	08/15/86 08/31/88	Gypsy Moth Population Biology: Storage Proteins as Indices of Nutritive Quality
Beltsville Area ARS, USDA Beltsville, MD 20705	E. P. Masler	86-CRCR-1-2111 8601507	$100,000	09/01/86 08/31/89	Molecular Endocrinology of Development and Reproduction in Lymantria dispar
Univ. of Maryland College Park, MD 20742	Pedro Barbosa	86-CRCR-1-2096 8601488	$100,000	09/01/86 08/31/88	Parasitoid Foraging Behavior and Spatial Patterns of Parasitism in a Forest-Host Parasitoid System

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: INSECT PEST SCIENCE-GYPSY MOTH

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TC	TITLE
Boyce Thompson Inst. for Plant Research Cornell Univ. Tower Road Ithaca, NY 14853	H. Alan Wood	86-CRCR-1-2154 8601486	$100,000	09/15/86 09/30/88	Persistent LdMNPV Infections of Gypsy Moths in Nature
Cornell Univ. Ithaca, NY 14853	Wendell L. Roelofs	86-CRCR-1-2112 8601540	$190,000	08/01/86 07/31/89	Biosynthetic Route and Enzymes for the Gypsy Moth Sex Pheromone
Pennsylvania State Univ. University Park, PA 16802	Robert A. J. Taylor	86-CRCR-1-2090 8601391	$99,000	09/01/86 08/31/88	Factors Affecting Silk Secretion and their Effect on Gypsy Moth Larval Dispersal
		TOTAL	$901,548		

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: INSECT PEST SCIENCE-PINE BARK BEETLE

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE
Univ. of Arkansas Fayetteville, AR 72701	F. M. Stephen, Jr.	85-CRCR-1-1689 8601573	$78,456	09/15/85 09/30/88	Bark Beetle/Fungal Dynamics: Influence of Host Tree Resistance and Suitability
Southern Forest Expt. Stn. FS, USDA, U.S. Postal Service Bldg. Room T-10210 701 Loyola Ave. New Orleans, LA 70113	Donald N. Kinn	86-CRCR-1-2155 8601563	$80,000	09/15/86 09/30/89	Pinewood Nematode: A Stress Factor Predisposing Pines to Attack by Bark Beetles
Southern Forest Expt. Stn. FS, USDA U.S. Postal Service Bldg. Rm T-10210 701 Loyola Ave. New Orleans, LA 70113	J. Robert Bridges	86-CRCR-1-2166 8601562	$150,000	09/15/86 09/30/89	Studies of Southern Pine Beetle Dispersal using Rare Elements as Markers
Agricultural & Forestry Expt. Stn. Mississippi State Univ. P.O. Drawer ES Mississippi State, MS 39762	T. E. Nebeker	86-CRCR-1-2114 8601258	$82,000	08/01/86 07/31/88	Bark Beetle/Host Interactions: Significance of Host Variability on Population Processes

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: INSECT PEST SCIENCE-PINE BARK BEETLE

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE
Texas A&M Res. Fdn. College Station, TX 77843	Thomas L. Payne	86-CRCR-1-2091 8601084	$89,548	09/01/86 08/31/88	Sensory Basis of Interspecific Olfactory Communication in Southern Pine Bark Beetle Complex
Brigham Young Univ. Provo, UT 84602	Rex G. Cates	85-CRCR-1-1691 8601572	$71,544	09/15/85 09/30/88	Bark Beetle/Fungal Dynamics: Influence of Host Tree Resistance and Suitability
Washington State Univ. Pullman, WA 99164-5045	Rodney B. Croteau	86-CRCR-1-2052 8601511	$150,000	08/01/86 07/31/88	Biochemistry of Pine Resistance to Bark Beatles and their Fungal Symbionts
Univ. of Wisconsin Madison, WI 53706	Kenneth F. Raffa	86-CRCR-1-2077 8601363	$200,000	09/01/86 08/31/89	The Role of Root Weevils and Associated Microorganisms in Predisposing Pines to Bark Beetle Attack

TOTAL $901,548

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: SOYBEAN RESEARCH

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE
Auburn Univ. Auburn University, AL 36849	C. M. Peterson	86-CRCR-1-2020 8600967	$103,364	09/15/86 09/30/89	Flower Abscission of Soybean: Ultrastructure and Physiology
Univ. of California Berkeley, CA 94720	Brian J. Staskawicz	86-CRCR-1-2086 8600299	$132,000	09/01/86 09/30/88	Molecular Basis of Race-Specific Avirulence in Pseudomonas syringae pv. glycines
Iowa State Univ. of Science & Technology Ames, IA 50011	Richard Shibles	86-CRCR-1-2039 8600698	$77,000	07/15/86 07/31/88	Respiratory Characteristics and Production Efficiency in Soybean Tissues
Univ. of Illinois Urbana, IL 61801	Bruce L. Vasilas	86-CRCR-1-2088 8601182	$70,000	09/15/86 09/30/88	N2 Fixation and N Supply Effects on Soybean Seed Fill Duration and Yield
BBN Laboratories Inc. 10 Moulton St. Cambridge, MA 02238	Howard S. Bilofsky	86-CRCR-1-2235 8602202	$10,000	09/15/86 09/30/87	Organization and Annotation of Gene Sequences of Agricultural Importance
Univ. of Wisconsin Madison, WI 53706	Dale M. Norris	84-CRCR-1-1501 8600351	$75,000	09/15/84 09/30/88	Phenylpropanoid-Based Inducible Soybean Resistance to Insects
		TOTAL	$467,364		

COMPETITIVE RESEARCH GRANTS PROGRAM
PROGRAM AREA: ALCOHOL FUELS RESEARCH

GRANTS AWARDED FOR FISCAL YEAR 1986

ORGANIZATION	PRINCIPAL INVESTIGATOR	GRANT NUMBER PROPOSAL NUMBER	AMOUNT	AGREEMENT PERIOD FROM TO	TITLE
Univ. of California Davis, CA 95616	Michael J. Holland	86-CRCR-1-2133 8601050	$108,000	09/01/86 08/31/88	Regulation of Pyruvate Decarboxylase Genes from Ethanol Producing Yeasts
Univ. of Florida Gainesville, FL 32611	L. O'Neal Ingram	86-CRCR-1-2134 8600984	$107,000	09/01/86 08/31/89	Construction of Lactose-utilizing Strains of *Zymomonas mobilis*
Boston Univ. Boston, MA 02215	Eva R. Kashket	86-CRCR-1-2207 8601083	$145,272	09/15/86 09/30/88	Physiology of Solvent Producing Clostridia
Michigan State Univ. East Lansing, MI 48824	R. U. Byerrum	86-CRCR-1-2135 8601105	$127,000	08/15/86 08/31/88	Glycerol Production by Plants

TOTAL $487,272

1890 RESEARCH FACILITIES

Question: CSRS has completed a $50 million, five-year project for the acquisition and improvement of research facilities and equipment at the 1890 Land-Grant Colleges and Tuskegee University, the President's budget request reflects the completion of this project, so no funds are requested for this purpose in fiscal year 1988. Would you please tell the committee, Mr. Jordan, what type of improvements were made to the 17 institutions included under this five-year project?

Answer: The improvements have been very visible and extremely beneficial to the research programs at each of the 17 institutions. The funds have been used to construct or renovate office space and laboratories, install irrigation systems, purchase land, equip laboratories with the latest in high technology equipment and to install computer systems.

Question: What is the current status of CSRS research facilities generally in terms of repair, maintenance, and upgrade requirements?

Answer: The repair, maintenance, and upgrade requirements of facilities at the 1890 Institutions and Tuskegee University are currently at an acceptable level. These institutions have wisely used the research facilities funds to improve, construct or otherwise meet the most urgent facilities needs. So, the current status is very good in relation to repair and maintenance of research facilities.

Question: Would you characterize CSRS research facilities as representing the state-of-the-art with respect to equipment and facilities?

Answer: Yes, I would characterize these research facilities as representing the state-of-the-art with respect to equipment and facilities. For instance, Alabama A&M University has equipped labs in soils, food science, remote sensing and crop science with latest models of scientific equipment. South Carolina State College has constructed a new research building which is equipped with all high technology research apparatus. Kentucky State University has developed some of the finest aquaculture research facilities in the country. The latest in convenience, automation and equipment have been initiated into the goat research facilities at Langston University, Oklahoma and Fort Valley State College, Georgia. These institutions are now able to participate with the State Agricultural Experiment Stations in conducting high-quality research on the needs of the individual States.

Question: Where do you believe improvements could be made? At what facilities in particular?

Answer: We have recently provided funds to one of our client institutions to conduct an evaluation study of the facilities programs. An evaluation will assess the progress made and provide insight on the impact the funds have had on research programs.

Such a study will reveal areas where improvement is needed and which institution or institutions have the greatest need for special attention.

Question: What new facilities were in the planning phases for construction or in actual construction during fiscal year 1987?

Answer: While many of the colleges and universities have completed major construction projects, renovation projects or equipment purchases; there are yet many projects in the planning stage. Virginia State University is planning a research complex which will provide offices and labs for the research faculty; Prairie View A&M has let bids for construction of a building to house laboratory and office space for research; and Tennessee State University is currently developing blueprints for a research complex for the research staff -- a major renovation project. Delaware State College research annex is under construction. Southern University, Louisiana, is planning for greenhouse construction. Prairie View A&M University, Texas has initiated plans for the construction of swine poultry facilities.

Question: What is the status of these projects?

Answer: Each institution has projects in the planning stage for fiscal year 1987.

Question: Is funding recommended for completion of each of these facilities?

Answer: Each institution has allocated funds for the completion of the proposed projects. Many of the administrators chose to accumulate funds for more than one year before initiating a project. State Administrators require that all funds be available before major projects are undertaken.

COOPERATIVE FORESTRY RESEARCH

Question: The McIntire-Stennis Cooperative Forestry Research Act provides matched Federal funds for Forestry Research including areas such as timber production, forest land management, wood utilization, and the development of new products and distribution systems. The proposed fiscal year 1988 budget includes an increase of $463,000 to the almost $12.5 million appropriated in fiscal year 1987. Do all States participate in the Cooperative Forestry Research Program?

Answer: Yes, all States are participating in the McIntire-Stennis Cooperative Forestry Research Program.

Question: I understand that the Secretary determines the funding that states will receive based on recommendations of a national advisory council. Does the funding under this program vary significantly from year to year in any given State?

Answer: Annual funding does not usually vary appreciably. The formula by which these funds are allocated is 40 percent determined by the relative number of acres of non-Federal commercial timberland in the State and 40 percent by the relative cubic volume of timber harvested in the State neither of which change rapidly. The third formula factor is the number of non-Federal dollars spent on forestry research in the State which accounts for 20 percent in the formula. Most of the changes in annual allocation are due to fluctuations in this factor. However, there is a limit to the amount of change in funding allocated to a State. This limit was recommended by the Cooperative Forestry Research Advisory Council and was put into practice several years ago by the Department so as to prevent sudden changes in research funding.

Question: Is this due to the lack of non-Federal funding sources or as a result of shifting priorities?

Answer: Changes in allocation to a State are usually the result of changes in non-Federal funding. These changes may be positive or negative, depending on the ability of the cooperating institutions to obtain non-Federal funds for forestry research.

Question: What is the ratio of Federal to non-Federal funding in the Program?

Answer: In Fiscal Year 1985, the most recent data available, the ratio was $60,121,012 non-Federal compared to $12,350,241 Federal — a ratio of almost 5:1 non-Federal to Federal. This ratio has gradually increased over time from a ratio of 1:1 in the early years of the program.

Question: Graduate students may gain direct involvement in research projects through the McIntire-Stennis Research Program. Does this program provide stipends or pay the tuition costs of these graduate students?

Answer: Graduate students are employed to work on the research projects funded by the McIntire-Stennis Program under the guidance of a professor who is the Principal Investigator on the project. Payment of tuition costs with these funds is not permitted. The graduate student is responsible for tuition payment.

FORESTRY COMPETITIVE GRANTS PROGRAM

Question: USDA transferred $4.5 million in Forestry Competitive Grants from the Forest Service to CSRS. Is this transfer complete?

Answer: The fiscal year 1987 transfer of $4.5 million from Forest Service to CSRS for the Forestry Competitive Grants program has been completed.

Question: Was Congress notified of the transfer?

Answer: When the funds were initially appropriated in 1985, the Report from the Senate Committee on Appropriations indicated that these funds should be administered through the CSRS Office of Competitive Grants. USDA and CSRS have continued to follow the intent of Congress in administering this program.

Question: Why was it transferred?

Answer: In fiscal year 1985, funds were initially appropriated for the Forestry Competitive Grants program in the Forest Service-Forest Research account. The 1985 Report from the Senate Committee on Appropriations indicated the Committee's desire that these funds be administered through the Office of Competitive Grants, which currently is part of CSRS. After considering the view of the Senate Committee on Appropriations, the Secretary of Agriculture decided that these funds should be transferred to CSRS in fiscal year 1985 and subsequent years.

FORESTRY COMPETITIVE GRANTS PROGRAM

Question: The President's Fiscal Year 1988 budget would eliminate the $4.5 million to fund research related to forest growth and utilization. Mr. Jordan, would you please tell the Committee what graduate-level institutions are eligible for forestry competitive grants?

Answer: Except where otherwise prohibited by law, any Federal, State or other governmental agency, public or private agency, institution, university, or organization, and business or individual in the United States shall be eligible to apply for and receive a research grant.

Question: What institutions are currently receiving these grants?

Answer: In fiscal year 1986, 63 grants were awarded under the Forestry Competitive Grants program. The recipients included 39 land-grant universities; 15 Federal research laboratories; 8 private and public universities; and one private-profit institution.

Question: Are any of these land-grant institutions?

Answer: Land-grant universities received 39 of the 63 Forestry Competitive Grants awarded in fiscal year 1986.

Question: Is this the only forestry research program providing grants to non land-grant institutions?

Answer: No, this is not the only forestry research program providing grants to non land-grant institutions. For example, the Rangelands Research Grants Program administered by CSRS is open to non land-grant institutions. Funds under the Cooperative Forestry Research Program go to support research at non land-grant forestry schools such as State University of New York at Syracuse, Sam Houston State University in Texas, and Michigan Technological University.

Questions Submitted by Senator Sasser

AGRICULTURAL EXPERTISE

Question: Dr. Bentley, today, you have outlined our advances in biotechnology and the technical assistance that we are able to provide to our farmers. As we continue to increase research in our educational institutions, we will have more and more technology available to our agriculture communities. I continue to hear requests from my home state for more technical assistance in several of these areas, especially soil conservation and resource management. Will there be sufficient, qualified staff to direct further research and provide the necessary assistance to help implement this new technology? And, do you believe we need to invest more into the higher education programs to ensure that this assistance will be available?

Answer: Scientific and professional expertise is one of the most critical factors in determining the future efficiency and economic performance of American agriculture. While the U.S. has reaped excellent returns on past investments in development and adoption of new technologies pertaining to food, agriculture, and natural resources, such clearly will not occur in the future unless a responsible investment is made to revitalize a seriously eroding base of scientific and professional expertise. A recent USDA report entitled "Employment Opportunities for Graduates in Agriculture, Natural Resources, and Veterinary Medicine" shows deficiencies of expertise in key fields relative to the future well being of this Nation. Annual demand for persons having doctoral degrees or postdoctoral experience in biochemistry, molecular biology, genetics, food science, nutrition, and plant/animal/soil sciences is expected to be very strong. Likewise, there will be strong employment opportunities available to qualified graduates in business and finance, institution management, and marketing. These findings further substantiate trends first identified in the 1980 USDA report providing an analysis of supply/demand relationships for graduates of higher education in the food and agricultural sciences.

Questions Submitted by Senator Cochran

AQUACULTURE CENTERS

Question: Last year, we appropriated $3.0 million to establish four aquaculture centers. What is the status of each center?

Answer: Four centers have been designated. The centers are located at Southeast Massachusetts University, Mississippi State University, The University of Washington, and one under joint management between The Oceanic Institute and The University of Hawaii. The center at the University of Washington has completed the planning process and has established its priorities for work to be conducted in fiscal year 1987. The other three centers are in the process of organization.

Question: Have funds been distributed to the centers?

Answer: By agreement with the centers, funds to cover expenses incurred in program planning at the centers are being made available. The balance of funds available will be distributed to the centers pursuant to the development of a detailed plan of work at each location.

Question: Why is there nothing in the budget to continue these centers?

Answer: While we are supportive of a strong aquaculture effort, our highest priority in fiscal year 1988 must be with the base program in support of the State-Federal partnership. The extent to which additional funds may be available in fiscal year 1988 to continue the work initiated at the centers will reflect the research priorities of the concerned States and institutions in continuing these efforts.

Question: The committee also requested USDA to review the need for additional centers. What is the status of this report and can you tell us of any of the findings?

Answer: The report has been prepared and is under review. It will be forwarded in the near future.

HIGHER EDUCATION

Question: I understand that USDA projects an annual 16 percent shortfall of college graduates in the food and agricultural sciences through 1990. Reports have shown that the graduate fellowship program has been successful. Is that true?

Answer: A recent USDA report entitled "Employment Opportunities for Graduates in Agriculture, Natural Resources, and Veterinary Medicine" shows deficiencies of expertise in key fields. Annual demand for persons having doctoral degrees or postdoctoral experience in biochemistry, molecular biology, genetics, food science, nutrition, and plant/animal/soil sciences is expected to be very strong. Likewise, there will be strong employment opportunities available to qualified graduates in business and finance, institution management, and marketing. These findings represent a continuation of trends first identified in the 1980 USDA report providing an analysis of supply/demand relationships for graduates of higher education in the food and agricultural sciences. The program attracted 259 outstanding doctoral and 43 master's fellows who represent some of the brightest minds available in the U.S. today. Whereas the average GRE score for all graduate students in agriculture is 969, among the lowest of all disciplines and declining, the average GRE score for USDA fellows in the biotechnology national need area is 1,309; for the agricultural engineering area, 1,187; for the food science and human nutrition area, 1,209; and 1,278 in the agricultural marketing area. Dissertation topics chosen by fellows to date include studies in molecular biology, plant biotechnology, animal diseases, water management, nutritional sciences, computer applications, and others representing targeted areas.

Question: What are colleges of agriculture doing to address the growing expertise shortages in the food, agricultural, and natural resources disciplines? Is the Department doing anything to recruit high-quality students?

Answer: Colleges of Agriculture and Natural Resources are working diligently to improve their recruitment and retention programs, to augment faculty development opportunities, and to strengthen curricula. Many are working in concert and are sharing resources for the solution of mutual problems. However, these efforts alone are not sufficient to overcome the generally held view of higher education in the food and agricultural sciences as being strictly related to production agriculture. This image problem cannot be overcome solely at the institutional level. Rather, substantial progress will require considerable effort by the entire food and agricultural system. Furthermore, increasing competition from other disciplines like computer science, engineering, and the medical sciences for the diminishing pool of academically outstanding science oriented students is exacerbating the situation.

Question: USDA's science and education budget includes some $778 million to conduct research. Yet only $2.0 million is requested for this direct support of higher education programs. Can we expect adequate returns from such a small Federal investment?

Answer: This $2 million program will provide support for educational programs at the 1890's Colleges and Tuskegee. We are proposing to increase funding for the Competitive Research Grants program and through the provisions of the Hatch Act and related formula base funded programs which provide graduate training opportunities.

QUESTIONS SUBMITTED BY SENATOR McCLURE

SPECIAL RESEARCH GRANTS

Question: Dr. Jordan, I would like to address just a few issues with you, especially the continued proposal by the Administration to delete the special grants programs. These research projects are vitally necessary in some instances to specific constituencies in my state. To completely delete these problems with no time for either the state or the specific associations to fund this research will be impossible. Has CSRS attempted to meet with groups associated with these special projects to discuss how alternative funding could be provided?

Answer: As part of our priorities and the Administration's overall spending reduction package, no funding was recommended for the Special Research Grants program. CSRS has discussed alternate funding for these projects with the Experiment Station Committee on Organization and Policy and many experiment station directors. It is anticipated that the directors of the State Agricultural Experiment Stations working within the flexibility allowed by the formula funded programs would reassess the research priorities and in that process continue research on some of the special research grant projects.

Question: How does CSRS review the progress being made by the researchers receiving these special grants?

Answer: An annual progress report is required for each on-going project and a final performance report for each completed or terminated project. Current Research Information System --CSIS-- reports and other special reports and on-site reviews, as needed, are used to supplement program-monitoring procedures and provide data for program planning and coordination.

Question: Has CSRS implemented a program of peer review of the ongoing special grants projects which would better provide CSRS with a method of recommending those projects which might be completed, changed to better address the specific project or be eliminated on the basis of completion or change in need?

Answer: The CSRS on-site reviews include the special grants and are conducted when they can be of greatest value to the institutions, usually on a three to five-year cycle. Through the on-site review system and by annual progress reports CSRS keeps current on the status of special research grants projects. In addition, special reviews have been organized to address certain special grants to determine future needs and approaches. The pesticide clearance and STEEP programs were reviewed recently and an evaluation of the pesticide impact assessment program is just getting underway. Other special grant programs such as animal health and tropical/subtropical research are continuously monitored by formal committee structures.

QUESTIONS SUBMITTED BY SENATOR GRASSLEY

COMPETITIVE RESEARCH GRANTS

Question: You mentioned in your statement that you were not able to fund a number of proposals for competitive grants. I believe you said you had 1,570 proposals requesting $328 million but only could fund 415 for $40 million. Has this shortage of funds had a significant impact on preventing us from funding some very important and worthwhile projects?

Is your new budget going to eliminate much of this problem?

I guess I have some concerns about this because you mentioned you are eliminating funding for the Special Research Grants program, the Morrill-Nelson permanent appropriation, and graduate training grants. Then you said you expect the funding for these programs can be picked up by the Competitive Research Grants Program. Isn't that going to put more pressure on an already under-budgeted program?

Answer: Although we have been able to fund some important and worthwhile projects in the Competitive Research Grants Program the demand for funds is very great and many more projects could have been supported based on the scientific review they received. Enthusiasm in the scientific community concerning investigating problems of agricultural importance is high and the ability to fund more proposals would allow us to capitalize on this enthusiasm.

INTEGRATED FARM FINANCIAL STATEMENTS

Question: You mentioned a number of projects the CSRS is working on to help farmers experiencing financial stress-- Integrated Farm Financial Statements, IFFS-- and also help with small-scale farming. I realize that these are important projects and that you are working with local people on these projects, but what is being done to make all farmers aware of these services?

Answer: Extension specialists are publicizing these programs and encouraging their use by farmers who are experiencing financial difficulty. They are also enlisting bankers and financial analysts who work with farmers to use them and make others aware of their availability.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

BIENNIAL BUDGET CYCLE

Question: Calls for budget reform are increasingly heard as budget deadlines are too often missed, important budget decisions are delayed, appropriation bills and other direct spending legislation are held up in committee, and omnibus spending bills take the place of timely and orderly consideration of individuals bills. One procedural reform that is being considered is the two-year budget cycle where budget and appropriations matters would be considered in the first year, and authorizations and oversight would be undertaken in the second year. Would your department/agency favor a biennial budget process? What benefits would your agency achieve in a two-year appropriation cycle?

Answer: The Cooperative State Research Service (CSRS) would favor a biennial budget process. A two-year budget process would allow CSRS and its State cooperating institutions to make longer-range planning decisions regarding their research programs. Also, the time spent on preparing budget requests would probably be reduced.

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission?

Answer: Approximately 96% of the CSRS 1988 budget request was the same as the 1987 budget request.

Question: What difficulties can you foresee in preparing and submitting a two-year budget to the Congress?

Answer: At this time, CSRS cannot foresee any difficulties in preparing and submitting a two-year budget to the Congress.

Question: If you oppose the biennial budget concept, please give this subcommittee your reasons why.

Answer: CSRS does not oppose the biennial budget concept.

SUBCOMMITTEE RECESS

Senator **Burdick**. Our next hearing will be held this Wednesday, March 11 at 10 a.m. in this same room. At that time, we will hear from representatives of the Farmers Home Administration. Until then, the subcommittee stands in recess.

[Whereupon, at 3:25 p.m., Monday, March 9, the subcommittee was recessed, to reconvene at 10 a.m., Wednesday, March 11.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

WEDNESDAY, MARCH 11, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:05 a.m. in room SD–138, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Sasser, Harkin, Cochran, McClure, Kasten and Grassley.

DEPARTMENT OF AGRICULTURE

FARMERS HOME ADMINISTRATION

STATEMENTS OF:

KATHLEEN LAWRENCE, ACTING UNDER SECRETARY FOR SMALL COMMUNITY AND RURAL DEVELOPMENT, DEPARTMENT OF AGRICULTURE

VANCE L. CLARK, ADMINISTRATOR, FARMERS HOME ADMINISTRATION

ACCOMPANIED BY:

JAMES C. ANDERSON, DIRECTOR, BUDGET STAFF, FARMERS HOME ADMINISTRATION

ROBERT E. SHERMAN, DEPUTY BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Senator BURDICK. Good morning. The subcommittee will please come to order.

The Farmers Home Administration will be represented at our hearing today as the committee continues its review of the fiscal year 1988 budget for the Department of Agriculture. Joining us to discuss the budget are: Kathleen Lawrence, Acting Under Secretary for Small Community and Rural Development; Vance Clark, Administrator of the Farmers Home Administration; Jim Anderson, Director of the budget staff for the Farmers Home Administration; and Bob Sherman, Deputy Budget Officer at the Department of Agriculture

The Farmers Home Administration administers a broad range of loan and grant programs that directly and indirectly assist farmers and their families. Often referred to as the lender of last resort, FmHA has historically extended loans to farmers that aid them in securing farm ownership, in continuing farm operations, in recovering from emergency, or in creating more favorable lending terms on prior credit commitments.

For low income and very low income households, FmHA rural housing programs have offered loans and grants for new construction of affordable rental and cooperative housing, for repair and improvement of borrower-owned homes, for rental assistance, and for maintaining the objectives of the 1949 Housing Act to provide safe and affordable housing to all.

The fiscal year 1988 budget calls for a continued shift from direct to guaranteed operating loans for farmers. The phase-down in direct loans is reflected in the decrease from $1.4 billion in fiscal year 1987 to $870 million requested in fiscal year 1988. For guaranteed loans, the administration recommends an increase of $440 million above the fiscal year 1987 level.

Under the farm ownership loans, the current law request is for $130 million in direct loans and $390 million in guaranteed loans. Under proposed legislation, no ownership funds would be available.

With additional servicing of loans, it is difficult to see how FmHA could afford to cut back by 975 its staff years available in fiscal year 1988; but this recommendation is due largely to the proposed termination of $2.1 billion in rural housing purchasing, construction and repair programs. The administration proposes replacing these with a rural housing voucher program that is expected to cost $378 million in fiscal year 1988 and will provide housing assistance payments for over 21,000 housing units to rural families.

The fiscal year 1988 budget also proposes to eliminate community and rural development credit programs that were funded at $520 million in fiscal year 1987. Private sector and local funding sources would be required to make up for these programs. Also proposed for elimination are $163 million in rural development grant programs.

There are two issues of general concern that I hope we can discuss and get some resolution on today. The first is the recent regulations that the Farmers Home Administration has proposed in dealing with the loan portfolios of farmers. These regulations are absolutely ridiculous in that they simply gut the program, render half of the currently eligible farmers ineligible for FmHA assistance, and throw up all sorts of new roadblocks to a farmer getting that final check to help him with his operation. I hope we can get to the bottom of just exactly what the administration is trying to do with these regulations.

The second issue of prime concern to me is the availability of credit for our farmers. Again, as in every year for the past several, we are facing a shortfall of credit. The North Dakota Farmers Home Administration ran out of credit on February 18 and cannot get additional funds. We are in the midst of the heavy lending period for our farmers. Something has got to be done to resolve these problems for our farmers and to resolve them fast, because they have got a lot more things to worry about than whether they are going to be able to get the money for which they are eligible and qualified.

With that, I look forward to hearing from you. At this time, I would like to recognize any other Senators for their opening statements. The Senator from Iowa?

Senator GRASSLEY. Mr. Chairman, I do not have any opening statement.

Senator BURDICK. We will proceed with the panel and recognize you, Mrs. Lawrence, first.

UNDER SECRETARY'S STATEMENT

Ms. LAWRENCE. Thank you, Mr. Chairman.

Good morning, Mr. Chairman and Senator Grassley. We appreciate this opportunity to discuss with you today the Farmers Home Administration budget for fiscal year 1988. This budget does meet the commitment of this administration to those farmers who face difficult economic stress through circumstances beyond their control and who need a hand-up to compete with their more fortunate neighbors.

At the same time, it recognizes the realities of budgetary restraint and helps to meet the Gramm-Rudman-Hollings deficit target. It also recognizes that many once-worthy programs have served out their purpose and should be retired or transferred to other agencies better suited to their operation.

The history of the Farmers Home Administration is amply marked by the creation of new programs, the expiration of some and the modernizing of others. The 1988 budget continues that process of change and accommodation in meeting the needs of rural America.

The Agency closed out the 1986 fiscal year with an outstanding portfolio of almost 2 million loans totaling $70 billion in farm, rural housing and community programs. Its lifetime history of 51 years shows more than 9.8 million loans and grants totaling $141 billion over that period of time.

Despite the benefits accruing to millions of farmers and other rural residents and their communities, that growth in activity unfortunately has not been without its costs in increasing the debt owed to the Government. Much of that debt is now delinquent, more than $6.5 billion, and a considerable amount of that is beyond collection.

For the 1988 fiscal year, we are requesting a total of $4.36 billion. That will permit the continued expansion of the guaranteed farm lending program, from $2.2 billion in 1987 to $2.5 billion in 1988. It also provides for the third-year funding of the 3-year interest buy-down program and for the emergency disaster program. As provided by the Food Security Act of 1985, emergency loans will now be limited to losses for which crop insurance is not available.

The interest buy-down program, guaranteed line-of-credit lending and the paperwork reductions throughout the guaranteed loan program have increased significantly the use of loan guarantees and have allowed for reductions in direct lending levels.

The budget proposes the establishment of a program to provide housing vouchers in rural areas not unlike HUD's program. The vouchers providing for 21,200 units of housing will be offered to low-income rural residents, a level comparable to the existing rental assistance program.

The community loan programs would be discontinued.

Mr. Chairman, not only does the 1988 budget recognize and meet the basic needs of rural America, it also recognizes the basic needs of rural America, it also recognizes the basic requirements of sound fiscal policy.

Thank you and, with your permission, I would like to turn now to Vance Clark, the Administrator of Farmers Home for a more detailed explanation of his budget.

Mr. CLARK. Thank you.

Senator BURDICK. Mr. Clark.

ADMINISTRATOR'S STATEMENT

Mr. CLARK. Good morning, Mr. Chairman and members of the committee. We do indeed appreciate this opportunity to be with you today to discuss our 1988 fiscal year budget and to provide an accounting of our efforts as the lender of last resort as we strive to meet the credit needs of rural America.

As you know, Farmers Home is the largest source of credit for over 1½ million families in the nation's smaller communities. In some cases, we may have become the only major source. Our outstanding loan portfolio of about $70 billion is now larger than that of the Farm Credit System, larger than the World Bank, and is exceeded only by a handful of the biggest banking institutions of our nation.

Given the realities of the agricultural economy and in the interest of budgetary concern, we have concentrated on providing funding as the lender of last resort and on the servicing and the counseling needed to keep our farm borrowers in business.

During the last fiscal year, special servicing assistance was extended to our farm borrowers in almost 100,000 instances. This included 43,000 loans rescheduled or reamortized, 2,500 loans deferred, 25,000 subordinated to other lenders which allowed new credit to be extended by the private sector, and 28,000 loans refinanced at the more favorable limited resource interest rates.

On a dollar basis, 73 cents of every dollar loaned in our direct operating and ownership programs were at that limited resource rate. This special servicing relief took in about one in every three of our farm borrowers, and I doubt that any could have continued their operations otherwise. As it was, we were able to keep over 98 percent of our farm borrowers in business during 1986. Or to put it another way, only 1.9 percent left our rolls last year. I think that is a truly remarkable accomplishment.

In its 51-year history, FmHA has provided more than 9.8 million loans and grants, as Ms. Lawrence has indicated, totaling just under $141 billion. The largest share, approximately one-half that total, went to farmers. The remainder financed a wide variety of community and rural housing and business projects. As Ms. Lawrence also outlined, we closed out our 1986 fiscal year with almost 2 million outstanding loans in our $70 billion portfolio.

The continuing increase in debt owed the government has become cause for concern, and rightfully so, especially since a growing amount of that may be uncollectible.

As of the end of the 1986 fiscal year, $4.8 billion of the $29.6 billion farm loan portfolio was more than 3 years in arrears. We expect that much of that overdue debt eventually could be written off the books, as much as $2 billion or more.

Nevertheless, many good farmers are still making headway in these days of general economic stress for agriculture, and we want to continue to help them survive.

TRANSITION TO GUARANTEED LOANS

To underline this goal, we are requesting $4 billion for the Agricultural Credit Insurance Fund, out of a total program budget request of $4.4 billion for the 1988 fiscal year. This will allow us to continue the transition from direct to guaranteed loans, a course charted by the administration several years ago and endorsed by the Congress in the authorizations included in the 1985 Food Security Act.

Under this request, the program levels would be $1 billion for direct operating loans, $2.5 billion for guaranteed operating loans, $295 million for emergency loans and $185 million for the continuation of interest buy-downs.

We have been successful this year in our continuing move toward guaranteed credit. By mid-January 1986, we had obligated only 988 guaranteed farm operating and real estate loans for about $125 million. By the same time this year, we had booked 2,123 guaranteed loans in these programs for almost $250 million, double the amount of the previous year.

This shift also is being reflected in the numbers of applications we are receiving. Direct loan applications are running about 25 percent below last year, and requests for guarantees are more than double the 1986 pace.

We also have undertaken loan referral and outreach efforts under our operation assist program to see that many of our farm loan applicants can get the credit they need. Under this program, our local people hand-carry applications and supporting documents and personally introduce the borrowers to the private-sector lenders, both local bankers and the Production Credit Associations as well as the Federal Land Banks. The approved lender program, under which the Farmers Home Administration pre-certifies private lenders for participation in the guaranteed loan program, has also helped the development of these programs. I am pleased to report that last year, 550 farmers obtained loans totaling $43 million in this unique manner. We will, of course, resume the practice this year if it becomes necessary.

Homestead retention and farm lease-back provisions, enacted in the Food Security Act, have helped to keep farmers with potential for success on their farms. Although no separate funding is required for these programs, both offer important opportunities for FmHA borrowers who are unable to continue their operations. About 100 farmers have rented their homes and adjoining land, with options to buy, and more than 300 farmers have already purchased their land under the lease-back/purchase option. These numbers, I think, could be greater, of course, but unfortunately, many farmers are simply giving up and leaving the land. Sad as it might be, that is a wise decision for many.

BANK FAILURES

A bit of innovation, too, is occurring in our attempt to assist the American farmer. We are engaged in two unique projects with the Federal Deposit Insurance Corporation involving farmers' credit needs when banks fail in their communities. When the FDIC notifies us that a bank in a farm community has closed its doors, we have a preselected team of FmHA farm loan specialists available to go to that community, to see if we can guarantee new crop loans that are in that portfolio. Results vary, but we did issue more than 40 letters of intent to guarantee loans in one particular community last year.

I think we all realize that the FDIC is a liquidator; they are not a continuing lender. Our immediate financial commitment has proven invaluable.

FDIC PILOT PROGRAM IN NEBRASKA

In Nebraska, we have just renewed a pilot program for a second year with the FDIC that also resulted in over 40 guarantee commitments in one community last year that lost both of its banks. The FDIC, as you know, has no authority to make loans to borrowers of failed banks. It can now, however, send a farmer to an operating bank which can, if willing, establish a value or a price for an existing loan, and FmHA can agree to guarantee that new note based upon a reduced value. FDIC can then write down that old loan, clearing its books, and the farmer is still in business, as happened in Nebraska.

We are evaluating that project to see if it can be a national program with us and with FDIC. The potential, I think, is there for a real lifesaver program for many farmers.

To meet the hard realities of the deficit situation and the need to control the federal debt, we are requesting no funding for the farm ownership, the community and the rural housing programs. We will submit legislation in support of these changes where it is required. Our proposals would initiate some of these changes in fiscal year 1987 by proposing supplemental appropriations language and rescissions to adjust the loan and grant program levels.

INVENTORY PROPERTY

Mr. Chairman, I would like to mention, too, a subject that has been widely misunderstood and, I think, perhaps misinterpreted from some of the press accounts that I have seen. The subject is the handling of farm property that has come into our hands through various means.

As you will recall, we had a strict policy for about 3 years that no farm property would be sold if the sale would adversely affect surrounding property values. Our state directors were under strict instructions to carefully consider the local property value question. Only if they could assure that local land values would not be harmed, could they proceed with the sale.

That decision was made when farmland values were falling, and falling precipitously in some states. For the most part, hopefully, that slide has ended, and we find ourselves now with some 5,000 farm properties on our hands that we cannot properly or economically manage.

A few weeks ago, I instructed the state directors to begin taking steps to put that property on the market. But, and this is crucial, I reminded them that the injunction concerning local values still stands and is now mandated by the 1985 Food Security Act and that they are required, without exception, to offer the former owner or operator the first right to lease that farm back.

With those two important caveats, we plan to sell rather than lease inventory property in an orderly, systematic manner. We are not in the business of running farms, and I hope you would agree that we should not be. Most of the accounts I saw on the subject, however, missed these points entirely and talked instead about Farmers Home flooding the local markets or planning to sell huge blocks of land. That simply is not the case. I appreciate the opportunity here this morning to clear up that confusion that might have come your way or to the attention of other members of the committee.

HOUSING VOUCHERS

Since the inception of the rural housing program administered by FmHA, the emphasis has been on single-family homes. By its very design, this program excludes very low income renters, often those households with the most severe housing need.

Because of the recognition that the primary housing deficiency in rural areas is not a physical shortage of adequate units, insufficient homeownership among the low income or failure of the housing market financial institutions, the 1988 budget proposes to reorient policy away from the current approach which emphasizes these goals. The main problem in rural America is income deficiency, a problem most efficiently addressed, we think, with housing vouchers.

In order to bridge this gap, we are requesting $378 million for a new housing voucher program, similar to HUD's, to offer some 21,200 units of housing primarily for the very low income families in rural areas. This level of assistance is comparable to that provided annually through the present rental assistance program. This would also provide assistance to families displaced through the prepayment of FmHA-financed rental housing projects.

FmHA would continue to service its existing loan portfolios and would continue the sale of some of its loan assets, as we are beginning to do this year.

INTEREST SUBSIDIES

I mentioned earlier that a high proportion of farm loans are being made at the limited resource interest rate. Today, that rate is 4.5 percent for the first 3 years, with increases every 2 years thereafter, depending on repayment ability. I hope you recognize that is a highly subsidized rate, as most of the other rates are at Farmers Home. Our rates are substantially below those of other lenders. Our regular operating loan interest rate is 7.5 percent, compared with commercial rates that run currently, I believe, as high as 13 percent. These subsidies have to be repaid at some point in time. I believe the day of reckoning is now upon us.

Our budget request for the Agricultural Credit Insurance Fund includes $3.6 billion to reimburse the fund for interest subsidies and other losses. This amount includes $2 billion for interest subsidies and $500 million for program losses incurred in fiscal year 1986 and the remaining $1.1 billion for losses in years before 1986 which have not yet been reimbursed to the fund.

For the Rural Housing Insurance Fund, the budget includes $3.1 billion for interest subsidies and other losses incurred in fiscal years 1985 and 1986 and administration of rental assistance contracts that are in force. The budget also includes $843 million to reimburse the Rural Development Insurance Fund, of which $763 million is for interest subsidies and other losses incurred in fiscal year 1986 and $80 million is from operations prior to 1986.

STAFFING AND AUTOMATION

For salaries and expenses, we are requesting an appropriation of $411 million. This will support a staff level of about 11,700, which would be a reduction of some 975 staff-years permitted by the termination of the housing, community and business loan and grant programs. This level of staffing, given termination of those programs, will allow us to maintain the high level of borrower counseling needed to improve the quality of our farm loan portfolio.

FmHA staff traditionally have managed larger loan workloads than their counterparts in commercial institutions, and I think unreasonably so. It is not unusual to find our local county office responsible for 200 to 300 loans, four to six times the volume handled by a loan officer in a commercial bank. Our lack of efficiency at times is, I think, indicative of this overload.

We have made significant strides in bringing automation to the local level within our agency, and I think, not a moment too soon. About three-fourths of our local offices are now equipped with computers, and we expect to complete that effort by this summer. The new automated techniques can allow us to respond to loan requests in shorter times, as specified by the law, and we expect also to make major gains in more adequately servicing our loan portfolio and following up, too, on our failing debts.

PREPARED STATEMENTS

Again, Mr. Chairman, let me emphasize that the 1988 budget is designed to meet the most basic needs of rural America. It also recognizes the basic requirements of sound fiscal policy. This concludes my prepared statement. I would be happy to respond to any questions that you or other members of the committee might have.

Senator BURDICK. Thank you, Mr. Clark.

[The statements of Ms. Lawrence and Mr. Clark follow:]

STATEMENT OF KATHLEEN LAWRENCE

Good afternoon, Mr. Chairman and members of the Committee. We appreciate this opportunity to discuss with you the FmHA budget for the 1988 fiscal year. This budget meets the commitment of this Administration to those farmers who face difficult economic stress through circumstances beyond their control and who need only a hand up to compete with their more fortunate neighbors. At the same time, it recognizes the realities of budgetary restraint and helps to meet the Gramm-Rudman-Hollings deficit target. It also recognizes that many once-worthy programs have served out their purpose and should be retired, or transferred to other agencies better suited to their operation.

The history of the Farmers Home Administration is amply marked by the creation of new programs, the expiration of some and the modernizing of others. The 1988 budget continues that process of change and accommodation in meeting the needs of rural America.

The Agency closed out the 1986 fiscal year with an outstanding portfolio of almost 2 million loans totaling $70 billion in farm, rural housing and community programs. Its lifetime history of 51 years shows more than 9.8 million loans and grants totaling just under $141 billion.

Despite the benefits accruing to millions of farmers and other rural residents and their communities, that growth in activity has not been without its costs in increasing debt owed the Government. Much of that debt is now delinquent -- more than $6.5 billion -- and a considerable amount may be beyond collection.

For the 1988 fiscal year, we are requesting a total of $4.36 billion. That will permit the continued expansion of the guaranteed farm lending program -- from $2.2 billion in 1987 to $2.5 billion in 1988. It also provides for the third-year funding of the three-year interest buy-down program and for the disaster emergency program. As required by the Food Security Act of 1985, emergency loans will now be limited to losses for which crop insurance is not available.

The interest buy-down program, guaranteed line-of-credit lending, and paperwork reductions throughout the guaranteed loan program have increased significantly the use of loan guarantees and allowed for reductions in direct lending levels.

The budget proposes the establishment of a program to provide housing vouchers in rural areas similar to HUD's program. Vouchers providing 21,200 units of housing will be offered to low-income rural residents, a level comparable to the existing rental assistance program.

The community loan programs would be discontinued.

Mr. Chairman, not only does the 1988 budget meet the basic needs of rural America, it also recognizes the basic requirements of sound fiscal policy.

Thank you.

STATEMENT OF VANCE L. CLARK

Mr. Chairman and Members of the Committee, we appreciate the opportunity to be with you today to discuss our 1988 fiscal year budget, and to give you an accounting of our efforts as the lender of last resort as we strive to meet the credit needs of rural America.

As you know, Farmers Home is the largest source of credit for over one and a half million families in the Nation's smaller communities. In some cases, we may have become the only major source. Our outstanding loan portfolio of about $70 billion is now larger than that of the Farm Credit System, larger than the World Bank, and is exceeded only by a handful of the biggest banking institutions of the Nation.

Given the realities of the agricultural economy and in the interest of budgetary concern, we have concentrated on providing the funding as the lender of last resort, and on servicing, and the counseling needed to keep our farm borrowers in business. During the last fiscal year, special servicing assistance was extended to our farm borrowers in almost 100,000 instances. This included 43,000 loans rescheduled or reamortized, 2,500 loans deferred, 25,000 subordinated to other lenders to allow new credit to be extended by the private sector, and 28,000 loans refinanced at the more favorable limited resource interest rates.

On a dollar basis, 73 cents of every dollar loaned in our direct operating and ownership programs were at the limited resource rate. This special servicing relief took in about one in every three of our farm borrowers, and I doubt that any could have continued their operations otherwise. As it was, we were able to keep over 98 percent of our farm borrowers in business for 1986, or, to put it another way, only 1.9 percent left our rolls last year, a truly remarkable accomplishment!

In its 51-year-history, FmHA has provided more than 9.8 million loans and grants totaling just under $141 billion. The largest share, approximately one-half the total, went to farmers. The remainder financed a wide variety of community and rural housing and business projects. We closed out the 1986 fiscal year with almost 2 million outstanding loans in our $70 billion portfolio.

The continuing increase in debt owed the Government has become cause for concern, and rightfully so, especially since a growing amount of it may be uncollectible.

As of the end of the 1986 fiscal year, $4.8 billion of the $29.6 billion farm loan portfolio was more than three years in arrears. We expect that much of that overdue debt could eventually be written off the books, as much as $2 billion, or more!

Nevertheless, many good farmers are still making headway in these days of general economic stress for agriculture, and we want to continue to help them survive.

To underline this goal, we are requesting $4 billion for the Agricultural Credit Insurance Fund -- out of a total program budget request of $4.4 billion for the 1988 fiscal year. This would allow us to continue the transition from direct to guaranteed loans, a course charted by the Administration several years ago and endorsed by the Congress in the authorizations included in the 1985 Food Security Act.

Under this request, the program levels would be $1 billion for direct operating loans, $2.5 billion for guaranteed operating loans, $295 million for emergency loans and $185 million for a continuation of interest buy-downs.

We have been successful this year in our continuing move toward guaranteed credit. By mid-January 1986, we had obligated only 988 guaranteed farm operating and real estate loans for about $125 million. By the same time this year, we had booked 2,123 guaranteed loans in these programs for almost $250 million--double the amount for the previous year.

This shift also is being reflected in the numbers of applications we are receiving. Direct loan applications are running 25 percent below last year, and requests for guarantees are more than double the 1986 pace.

We also have undertaken loan referral and outreach efforts under our "Operation Assist" to see that many of our farm loan applicants can get the credit they need. Under this program, our local people hand-carry application and supporting documents and personally introduce borrowers to private lenders, to both local bankers and to the Production Credit Associations as well as Federal Land Banks. The approved lender program, under which the Farmers Home Administration precertifies private lenders for participation in the guaranteed loan program, has also helped the development of these programs.

I am pleased to report that, last year, 550 farmers obtained loans totaling $43 million in this unique manner. We will, of course, resume the practice this year if necessary.

Homestead retention and farm lease-back provisions, enacted in the Food Security Act, have helped keep farmers with potential for success on their farms. Although no separate funding is required for these programs, both offer important opportunities for FmHA farm borrowers who are unable to continue their operations. About 100 farmers have rented their homes and adjoining land, with options to buy, and more than 300 farmers have purchased their land under the lease-back/purchase option. These numbers could be greater, of course, but unfortunately, many farmers are simply giving up and leaving the land. Sad as it might be, this is a wise decision for many.

A bit of innovation, too, is occurring in our attempt to assist the American farmer.

We are engaged in two unique projects with the Federal Deposit Insurance Corporation involving farmers' credit needs when their bank fails. When the FDIC notifies us that a bank in a farm community has closed its doors, we have a preselected team of FmHA farm loan specialists available to go to that community, no matter where, to see if we can guarantee new crop loans. Results vary, but we did issue more than 40 letters of intent to guarantee loans in one community last year.

The FDIC is a liquidator, not a continuing lender, and our immediate financial commitment has proven invaluable.

In Nebraska, we have just renewed a pilot program, for a second year, with the FDIC that also resulted in over 40 guarantee commitments in a community that lost both of its banks. The FDIC, as you know, has no authority to make loans to borrowers of failed banks. It can now, however, send a farmer to an operating bank who can, if willing, establish a value or price for an existing loan, and FmHA can agree to guarantee a new note based on that reduced value. FDIC can then write down the old loan and clear its books, and the farmer is still in business, as happened in Nebraska. We are evaluating the project to see if it could be a national program for us with FDIC. The potential is there for a real "life saver" program for farmers.

To meet the hard realities of the deficit situation and the need to control the Federal debt, we are requesting no funding for the farm ownership, the community and the rural housing programs. We will submit legislation in support of these changes where required. Our proposals would initiate some of these changes in FY 1987 by proposing supplemental appropriations language and rescissions to adjust the loan and grant program levels.

Farm Inventory Property

Mr. Chairman, I would like to mention a subject that has been widely misunderstood -- and misinterpreted -- from some of the press accounts that I have seen. That subject is the handling of farm property that has come into our hands through various means.

As you will recall, we had a strict policy for about three years that no farm property would be sold if the sale would adversely affect surrounding property values. Our State Directors were under strict instructions to carefully consider the local property value question. And only if the answer were, "No, local values will not be harmed," could they proceed with the sale.

That decision was made when farmland values were falling -- and falling precipitously, in some states. For the most part, hopefully, that slide has ended, and we find ourselves now with some 5,000 farm properties on our hands that we cannot properly or economically manage.

A few weeks ago, I instructed the State Directors to begin taking steps to put that property on the market. BUT, and this is crucial, I reminded them that the injunction concerning local values still stands, and is now mandated by the 1985 Food Security Act, and that they were required, without exception, to offer the former owner or operator the first right to lease the farm back.

With those two important caveats, we plan to sell rather than lease inventory property, but in an orderly, systematic way. We are not in the business of running farms, nor should we be. Most of the accounts I saw on the subject, however, missed those points entirely and talked instead about Farmers Home "flooding" local markets or planning to sell huge blocks of land. That simply is not the case, and I appreciate the opportunity here to clear up any confusion on the subject that might have come your way.

Housing Voucher Program

Since the inception of the rural housing program administered by FmHA, the emphasis has been on single-family homes. By its very design, this program excludes very-low-income renters, often those households with the most severe housing need.

Because of the recognition that the primary housing deficiency in rural areas is not a physical shortage of adequate units, insufficient homeownership among the low-income, or failure of housing market financial institutions, the 1988 budget proposes to re-orient policy away from the current approach which emphasizes these goals. Instead, the main problem in rural areas is income deficiency, a problem most efficiently addressed with housing vouchers.

In order to bridge this gap, we are requesting $378 million for a new housing voucher program, similar to HUD's, to offer 21,200 units of housing primarily for very low-income families in rural areas. This level of assistance is comparable to that provided annually through the present rental assistance program. This would also provide assistance to families displaced through the prepayment of FmHA-financed rental housing projects.

FmHA would continue to service its existing loan portfolios and would continue the sale of some of its loan assets, as begun in the 1987 fiscal year.

Reimbursement for Losses

I mentioned earlier the high proportion of farm loans made at the limited resource interest rate today at 4.5 percent for the first three years, with increases every two years thereafter, depending on repayment ability. That is a highly subsided rate, as are most of the other rates on FmHA loans. Our rates are substantially below those of other lenders. Our regular operating loan interest rate is 7.5 percent compared with commercial rates that run currently, I believe, as high as 13 percent. Those subsidies have to be paid for at some point in time. The day of reckoning is upon us!

Our budget request for the Agricultural Credit Insurance Fund includes $3.6 billion to reimburse the fund for interest subsidies and other losses. This amount includes $2 billion for interest subsidies and $0.5 billion for program losses incurred in fiscal year 1986 and the remaining $1.1 billion for losses in years before 1986, but not yet reimbursed to the fund.

For the Rural Housing Insurance Fund, the budget includes $3.1 billion for interest subsidies and other losses incurred in fiscal years 1985 and 1986, and administration of rental assistance contracts. The budget also includes $843 million to reimburse the Rural Development Insurance Fund, of which $763 million is for interest subsidies and other losses incurred in fiscal year 1986 and $80 million is from operations prior to 1986.

Salaries and Expenses

For salaries and expenses, we are requesting an appropriation of $411 million. This will support a staff year level of 11,700, which would be a reduction of 975 staff years permitted by the termination of the housing, community and business loan and grant programs. This level of staffing, given termination of these programs, will allow us to maintain the high level of borrower counseling needed to maintain and improve the quality of the farm loan portfolio.

FmHA staff traditionally have managed larger loan workloads than their counterparts in commercial institutions, unreasonably so, I might add! It is not unusual to find an FmHA county office responsible for 200 to 300 loans, four to six times the volume handled by a loan officer in a commercial bank. Our efficiency, or lack of efficiency, at times is indicative of this overload!

We have made significant strides in bringing automation to the local level within our Agency, and not a moment too soon. About three-fourths of the local offices are now equipped with computers, and we expect to complete this effort by the summer. The new automated techniques can allow us to respond to loan requests in the shorter times specified by law, and we expect also to make major gains in more adequately servicing our loan portfolio and following up on failing debts.

Again, Mr. Chairman, let me emphasize that the 1988 budget is designed to meet the most basic needs of rural America. It also recognizes the basic requirements of sound fiscal policy. This concludes my prepared statement. I would be happy to respond to any questions that you or other members of the Committee may have.

PROPOSED REGULATIONS

Senator BURDICK. I am concerned about the proposed regulations now under consideration. FmHA seems to be trying to find new ways to deny loan applications and to phase out direct loan programs. Instead of helping beginning farmers, FmHA is making it harder for them to qualify for loans. Instead of simplifying procedures and reducing paperwork, FmHA is making the process even more complicated and adding to the redtape that borrowers must untangle.

FmHA was intended to be a lender of last resort for family farmers who could not obtain conventional credit, but the agency seems to be drifting away from this purpose and appears to be preoccupied with discouraging new borrowers. If borrowers could meet the requirements in these regulations, they would not need FmHA's help.

Instead of thinking of ways to make life harder for FmHA borrowers, you should be working with them to help them keep their farms.

The proposed regulations would require a preapplication review of all FmHA loan applications. Why are you imposing this additional hurdle for borrowers, this preapplication procedure?

Mr. CLARK. You are right, Mr. Chairman, they are proposed regulations, and I would emphasize: they are proposed. They are out for comments, and I think a lot of cleaning up and scrubbing will occur between now and their final publication date. Some of the proposals have raised a lot of concerns in many communities.

You are also right that our responsibility is as a lender of last resort. I emphasize that we also need to be a prudent lender of last resort. We are seeking tools that will allow us to meet our role as prudent lenders. Hopefully, these are not all bad changes that we want to put into effect. Indeed, they are going to speed up processing in many ways. We are going to change some of the proposals that are out for public comment now. I think the final result will be better accepted than we might expect.

PRESCREENING

Senator BURDICK. For the life of me, I do not understand why you introduced this other factor, a preproposal, another hurdle. It certainly is not going to come out in the final regulations, is it?

Mr. CLARK. Mr. Chairman, we have already determined that the prescreening process should not affect or be a condition of our existing borrowers. We are not going to require our existing borrowers to go through any prescreening process. We already have a commitment and an investment in those borrowers. We want to see them succeed. So their requests for credit are automatically going to be put into our pipeline.

Prescreening is really to shorten the response time to new borrowers who are in the waiting line for our credit. We can take a quick look at their application and determine whether they should continue the application process. I think you will find it will speed up the process.

Senator BURDICK. Then you intend that this preapplication will not append to existing borrowers but only to new borrowers, new applicants? Is that what you are saying?

Mr. CLARK. Yes, sir; new applicants.

Senator BURDICK. Why is that necessary?

Mr. CLARK. Many times, weeks and weeks go by before we can make a determination of farmers' credit worthiness, as we go through the whole process of analyzing their financial statement, their cash flow, their crop plan and the complete documentation.

This way, we can take a quick look by applying generally accepted agriculture lenders ratios and make a quick determination. I would emphasize, Mr. Chairman, that if we make that prescreening answer of no to an applicant, he still has access to our appeal process. If the applicant does appeal, we indeed will look at the application in more detail. So, we can quickly tell him yes, you have got a chance, and we will proceed with processing the application or no, it does not look as though you are going to meet our criteria and you ought to make other arrangements.

Senator BURDICK. This new applicant who is turned down under this process, does he have the right of appeal?

Mr. CLARK. He does.

Senator BURDICK. To whom does he appeal?

Mr. CLARK. The county supervisor in our local office makes the first determination. It then goes to the district director, and it can go up to the state director.

Senator BURDICK. Has this preapplication process ever been used before in farm lending, in your administration, in your division, for anybody along the line?

Mr. CLARK. In the Farmers Home Administration, no. The private sector, I think, does some of that. However, I do not think they do it in that formalized form. They make quick evaluations of a financial statement to make quick decisions.

Senator BURDICK. In other words, at this point in this application, it is just a preapplication and he may have his loan turned down, he has the right of appeal in the department, and that too can be turned down. So then it is all over.

Mr. CLARK. He could be turned down at any point, even though we go through the whole process, Mr. Chairman. The appeal process is really the same at any point in the process.

We rejected about 21 percent of our direct loan applicants last year. Another 27 or so percent did not receive loans for other reasons such as withdrawal of request or expiration of the commitment. So overall, almost 50 percent of our applicants did not receive loans last year.

Senator BURDICK. As a conclusion, is it not a fair statement to say that the introduction to this new procedure makes it more difficult for the farmer to get a loan? Is that not a fair statement?

Mr. CLARK. It could mean a delay for new borrowers. It could delay the process for a new applicant coming to our office if he goes through the appeal process to determine whether his application is really financially sound. But he is getting an answer within a few days of whether or not he has a chance to go on with his application with us. That is a big plus.

Senator BURDICK. A few days? Really?

Mr. CLARK. Do not pin me down. It is a matter of days rather than weeks, though; I am convinced I can say that.

RISK RATIOS

Senator BURDICK. FmHA also proposes to use so-called risk ratios as a standard by which to deny or approve a loan application. Have you tried to measure how many applicants, particularly existing borrowers, would be denied loans because they could not meet these ratios? How does this risk ratio work?

Mr. CLARK. We did do some legwork on that, Mr. Chairman. We took our existing portfolio, did some computer models to see what these new risk ratios might do. It indicated that there is a possibility that 18 percent of existing borrowers would not have qualified for our credit in the beginning if these standards had been in place.

That is only our initial look at this. I do not know whether further research will bear this out. We think there is some merit in those numbers.

Senator BURDICK. Many of the farmers and farm organizations in North Dakota tell me that this risk ratio could affect as high as 50 percent or current borrowers. Is that correct?

Mr. CLARK. I do not think that is true. However, if the use of these ratios caused a significant increase in loan denials, we would have to reconsider the process, because we know our commitment is as a lender of last resort. I must tell you that these standards we are contemplating are much lower than the commercial sector's. No bank could do what we are doing nor could the Farm Credit System.

Senator BURDICK. That is why you were established. You are a lender of last resort.

Mr. CLARK. We recognize that.

Senator BURDICK. When you review this farmer's application will you consider other factors such as his credit history, his farm plan, his financial management, the availability of credit in the area and his ability to farm, all those things? Are they really taken into consideration when the application is considered, in other words the whole picture?

Mr. CLARK. The prescreening?

Senator BURDICK. Yes.

Mr. CLARK. Not at that point, no. The prescreening is really looking at financial numbers to see whether there is a chance of his going on. That applicant still has to pass the eligibility clearing and screening through our county committees.

Senator BURDICK. At this point you do not know whether he is a good farmer or a poor farmer, is that right?

Mr. CLARK. The numbers should provide us some indication. If he has a history of business that is so bad, is he good or is he bad?

Senator BURDICK. A good farmer can be wiped out, too, through adversities, you know.

Mr. Clark. Unfortunately, we are discovering that through our own loss projections.

EVALUATING CASH FLOW

Senator Burdick. FmHA proposes to require reserves for taxes, repairs and depreciation in evaluating cash flow. How will the amounts for these required reserves be calculated?

Mr. Clark. I think it would be on a case-by-case basis, Mr. Chairman. The taxes are not the same overall nor are the investments needed.

Incidentally, we find requests lower this year because our borrowers, particularly, are experiencing less energy costs, less capital demands for equipment and so on. So I think that is considered automatically.

COLLATERAL

Senator Burdick. FmHA proposes to require liens on all of a borrower's assets, not just on assets sufficient to assure repayment of the loan. Why does he have to put the whole farm and everybody else into the act?

Mr. Clark. The only answer I can give you is that we need to cover ourselves. Our requirements are, as any lender's should be, to be covered by assets that are out there.

Now, over-collateralization is another point. We should not require over-collateralization except if we are experiencing a depreciation in equipment or if it is a 7-year loan and we know that equipment is going to depreciate *x* percent per year. In those cases, we need additional collateral to cover us.

We want to be logical in what we do on collateralization. I hope we do not require over-collateralization.

Senator Burdick. I understand the regulation proposes all. It is not enough to cover the debt; it is all, whether it is a small home in town or whatever it is, all property.

Mr. Clark. I think that is a little strict.

Senator Burdick. Is that not going a little too far?

Mr. Clark. I think it is, and that is one of the items we are going to review in our regulations. We have heard that before and I agree with you.

Senator Burdick. I hope you look at that, because this could cause a lot of difficulty.

SURPLUS CROPS

FmHA proposes to extend the surplus crop rule to guaranteed loans as well as direct loans. Is this not contrary to the purpose of FmHA?

Mr. Clark. I believe you are referring, Mr. Chairman, to the authority we have, that we have not exercised, to restrict operating credit to a borrower if he is going to expand his operations so that it would result in production of surplus crops. We have not done that, and that is not in effect in any of our states.

Senator Burdick. Under the rule, it states that the farmer who raises a surplus crop cannot qualify for assistance. That is not in vogue?

Mr. CLARK. No.

Senator BURDICK. Is that in the planning stage?

Ms. LAWRENCE. No, sir; it is not.

Senator BURDICK. That is good news.

SALE OF ACQUIRED LAND

Let's talk about the sale of acquired land, for example. The regulations would permit FmHA to auction farmland to the highest bidder within 1 year of acquiring the land through foreclosure. The historic mission of FmHA has been to help foster family farms. Had not FmHA previously restricted sales of its acquired farmland to family-size farms for at least 3 years after acquisition?

Mr. CLARK. That is correct.

Senator BURDICK. Is that a rule? Is that being followed?

Mr. CLARK. It is being followed. It is in our regulations now that if suitable property remains in inventory for 3 years it must be reclassified as surplus property. Indeed, we will only sell that property to an eligible borrower: a family-size farmer.

However, our inventory is growing. We now have 1.7 million acres, 5,000 farms in inventory. We need to move that. We think that 3-year retention is too restrictive, and that we need to shorten that period. If we cannot do that within a year, is 2 years better? Is 3 years better, or is 10 years better? We think 1 year is ample time to find an appropriate buyer.

LEASE BACK PROVISIONS

Senator BURDICK. I understand FmHA had previously restricted sales of its acquired farmland to family-size farms. Whatever happened to that theory?

Mr. CLARK. It is still there, Mr. Chairman. We do lease that land back with an option to buy. I made that point in my statement. If that previous owner or operator has lost that land to us, we are committed to give him the opportunity to lease that land back for a 3-year period—he has to do it within 1 year with an option to buy and with outside appraisals.

We are doing those things to get that back in the hands of a family-size operation. Our eligibility rules still require that.

Senator BURDICK. You say he has an option to buy it back?

Mr. CLARK. Yes, sir.

Senator BURDICK. Tell me how he can do it. What value is placed on it? What is the procedure to get that back in his ownership?

Mr. CLARK. He has the first option to apply to lease it back with or without an option to buy.

The capitalization value is placed on the farm. It is the value of the farm based on its future earnings potential. It has nothing to do with the previous debt on it or assessed valuations or anything else.

Senator BURDICK. In other words, during that 3-year period, he would have the opportunity to buy that land back under the present appraised value, is that correct?

Mr. CLARK. Capitalized value, yes.

Senator BURDICK. Would he have any down payment to make? And if so, how much?

Mr. CLARK. There is no down payment. He is eligible then for another loan from us. In other words, if we foreclose or he voluntarily conveyed it, we will turn right around and put a new value on it and give him that opportunity to buy it back. You have to have a viable program. It has to cash flow. Does it make sense for him to reacquire that land? Can he make the payments on it, producing the crops or livestock that will allow that to happen?

Senator BURDICK. In other words, he has to prove to you some ability to be able to finance operations, is that correct?

Mr. CLARK. He does.

Senator BURDICK. And that amount is within your discretion of what is required?

Mr. CLARK. I think it speaks for itself, whatever the plan is. What are cattle selling for? What are soybeans going to produce? It is really a cut-and-dried plan.

Senator BURDICK. When he makes this new contract, it is on the value at that time, not the old value.

Mr. CLARK. That is correct.

Senator BURDICK. Have any of these plans been fulfilled? Have any of these sales been made?

Mr. CLARK. Yes; they have. I think the statement shows that 100 farms have been leased and rented back and are now in operation, and there are 300 that we already have completed the sales.

Senator BURDICK. That is over the whole country.

Mr. CLARK. Yes; I would agree that those numbers seem rather small, but a lot of those farmers are leaving. They do not want that opportunity.

Senator BURDICK. I know a lot of farmers who want the opportunity, according to their messages I have received.

ELIGIBILITY FOR LOANS

My attention has been called to an experience regulation requirement. It proposes that applicants, to be eligible for loans that we have been talking about, must have experience operating and managing a farm in 3 of the last 5 years. It also would require preferences for existing borrowers and would prohibit loans to applicants who previously entered into debt settlement with FmHA. Is that correct?

Mr. CLARK. That is correct.

Senator BURDICK. In other words, if an applicant had entered into a debt settlement, he could no longer be in line to buy that farm back.

Mr. CLARK. Unless.

Senator BURDICK. All right, what is the unless?

Mr. CLARK. Unless he lost that through no acts of his own, through uncontrollable circumstances: drought, devastation, infestation, whatever. If that really caused his failure, he is eligible. But if he is a poor manager, it would exclude him.

Senator BURDICK. That gives the lender quite a lot of discretion, whether he is a poor farmer or not. If you conclude that he is a poor farmer, he does not get the loan, correct?

Mr. CLARK. Our county committees would vote on that. I think the eligibility question would be back to our county committees. A three-member county committee of his peers would make that decision.

Senator BURDICK. But you would have the ultimate decision, you or the department.

Mr. CLARK. No; we cannot overturn at the present time a positive evaluation of the county committee. However, our regulations are proposing that we be able to do that, since we can go the other way. If they find somebody eligible, we cannot overturn that. If they find him ineligible, we can.

Senator BURDICK. In these proposed regulations, you could do it if they were adopted.

Mr. CLARK. Yes.

Senator BURDICK. And you would be the sole determiner of whether he had the ability to continue farming. If you say no, there is no loan.

Mr. CLARK. We would not do that indiscriminately, Mr. Chairman. We have to consider the facts of each case. We would look at his history, back through the county committee, find out if he is a good farmer. But I think the numbers would speak for themselves. If he was wiped out because of a drought, he would be eligible.

Senator BURDICK. You just said under the present proposed regulations, you would have that authority to make that decision.

Mr. CLARK. Yes. Should a lender not be able to do that?

Senator BURDICK. I am just asking what the process is.

Do you consider a young man who grew up on a farm, who has been driving a tractor since he was 16 years of age, to have adequate experience in managing and operating a farm to make him eligible for a loan, for 3 of the last 5 years?

Mr. CLARK. I would say yes. If he has been on the farm, a hands-on operation with his parents, he ought to be able to do that. Again, however, the financial aspects of the proposal would have to be considered.

Senator BURDICK. How about a young man who just got out of college with an agricultural degree from the North Dakota State College or something like that; would he qualify?

Mr. CLARK. Yes; he would, if indeed his studies were agricultural. If he was studying photography, no; but if he was studying agriculture, yes.

Senator BURDICK. We ought to get back to the other point. That is part of the qualification, but the biggest qualification is some financial backing at the time.

Mr. CLARK. If his deal pencils out and he is eligible for our programs, we can make him a loan. We base it on education or on farm experience.

Senator BURDICK. These students who just graduate do not pencil out very well, you know.

Mr. CLARK. As a beginning farmer, he ought to start by leasing the land, I would think, working with his parents, but ultimately he can get into our programs.

AVAILABILITY OF CREDIT

Senator BURDICK. I am very concerned about the availability of credit for our farmers this spring and in fiscal year 1988. You state in your testimony that you have been successful this year in your continuing move toward guaranteed credit. I just cannot buy that. The figures that I have from our own administration indicate that your operating loans, both direct and guaranteed, are down this year, as compared to last year, by 18 percent and the loan value is off about $200 million.

If you would, I would like to draw your attention to North Dakota, for example, where there is definitely a shortfall of credit. The allocation for direct operating loans for the first two quarters for North Dakota was just over $47 million. North Dakota ran out of money on February 18, just a month and one-half after it had been made available.

What has North Dakota been doing since February 18 with regard to operating loan applications?

Mr. CLARK. I certainly hope they have been selling their guaranteed program. They have booked over $10 million in our guaranteed operating loan program. They have booked over $5.4 million in guaranteed farm ownership loans. The guaranteed program in North Dakota is working and working well and is providing much of the needed credit.

They have also booked almost $47 million in direct operating loans and about $1.5 million in direct farm ownership loans. They are one of the largest states in our direct loan program. Texas, for example, has booked about $70 million in direct operating loans. North Dakota is right up there.

Senator BURDICK. I do not quite understand your terminology "booked." I understand there is $10 million that has been either authorized or approved, but there is no money in North Dakota.

Mr. CLARK. They are out of the original distribution for the first and second quarters. We are now in the process of notifying our field about what they can do now to get their third-quarter funds moved up. We only have a couple weeks remaining in this quarter. April 1 begins the third quarter and more guaranteed and direct loan funds will be available.

Senator BURDICK. When you say "booked," that means they have been approved?

Mr. CLARK. It means the loans have actually been obligated and the funds will be delivered to the borrower.

Senator BURDICK. But no money has passed yet.

Mr. CLARK. Not in the pipelines. If you say there is $10 million out there, I am not aware of it.

Senator GRASSLEY. Would the chairman let me explore this area?

Senator BURDICK. Yes.

DIRECT OPERATING LOANS

Senator GRASSLEY. Along that same line, though, I think the ultimate is: Is the money going to be there for all of the applications that would otherwise qualify? Assuming they would qualify, will the money be there and will it be there timely? I think that is what we need to know.

Past practice has sometimes been for surplus states, if that money was reallocated, will there be timely reallocation or whatever else needs to be done?

Mr. CLARK. Normally we do that in most of our funding. However, the direct operating loan dollars are so in demand all over the nation that we probably have not had anything to pool and reallocate. So really, what the states have now is what they are going to get for this year.

That is where our Operation Assist will come in as it did last year. Last year we ran out of direct funds. For the first time in many years, we did not run to the Hill and say, churn up more dollars for our direct loan programs. We did it through Operation Assist and we did it by pushing our guaranteed loan programs.

If we do anything else, I think we are sending the wrong signal to the field. We need to make the guaranteed program work—to get the private sector in there with a commitment to finance agriculture across the nation.

So yes, we will run out of direct funds as we did last year. We expect to do it again this year.

GUARANTEED OPERATING LOANS

Senator GRASSLEY. What about on the guaranteed program; are there any limits there that would cause you to run out so that the farmers who need the help will not be able to get it?

Mr. CLARK. We think we have adequate guaranteed funds. We have $1.4 billion for direct operating loans. We have $2.2 billion for guaranteed operating loans this year and about $1.7 billion are not yet obligated. We think there are adequate funds for the guaranteed program, and that is the way we have to go.

Senator BURDICK. The problem is that the third- and fourth-quarter allocations are roughly only $16 million, half the amount of the second-quarter allocation. What are you going to do to guarantee that there is enough credit for those farmers who are eligible then?

Mr. CLARK. We think in your state that there are adequate funds. The big challenge in your state is to get lenders to make a commitment to agriculture. I keep making speeches to those bankers. I tell them they cannot turn their backs on agriculture which is the basis of our whole financial well-being. We have to sell the guaranteed program.

Senator BURDICK. I admire you for making those speeches, but I would like to have it fulfilled with cash. That is what I like: cash for these farmers out there.

Mr. CLARK. Mr. Chairman, those farmers do not want to leave the security blanket of Farmers Home. The rates are low: 7.5 percent. In your state private lending rates are as high as 13 percent. Why not go for the best deal? They keep pushing for direct loans. But we have to push them out of that nest or not allow them to get in that nest. They have to go to guaranteed lenders.

Senator BURDICK. I think we ought to hear from Iowa on this one.

Senator HARKIN. You do not want me to get involved on that one. We do not have the time today for that.

Senator BURDICK. I yield.

Senator HARKIN. I have some other things I want to bring up today, Mr. Chairman. If you do not mind, I would like to ask some questions, not specifically on this topic. I would like to switch subjects.

Senator BURDICK. Go ahead.

Senator HARKIN. Thank you, Mr. Chairman.

RURAL DEVELOPMENT FINANCE CORPORATION

Mr. Clark, I want to go over a program that started with the present farm bill, the Food Security Act of 1985. I do not know what is going on, but there is something funny going on with this program, even though it has a lot of support. I know you have been working on the nonprofit National Rural Development and Finance Program. But do you realize it has been 15 months now since Congress passed that? Fifteen months and we still do not have section 1323 in place. Are we going to have that program this month or not?

Mr. CLARK. You are talking about the second set of regulations out there allowing the technical funds to flow either way.

Senator HARKIN. I am talking about getting the program going.

Mr. CLARK. We are waiting for the program, Senator. Just give us an application from your state, and let us process it. We have no applications from your state completed. There are two, I think, in the process but not from Iowa.

Senator HARKIN. I am glad you responded that way. Let's get into that now. I know that Senator Grassley is going to have more on this because he is really the father of this whole program and has done, really, the seminal work on it. But I have to say that Senator Grassley, Senator Dole, Senator Burdick, Senator Cochran and I have been very involved in this legislation. All of us have.

The Governors of Iowa, Kansas, Mississippi, North Dakota, as well as eight other rural state Governors, have affiliated with the National Rural Development and Finance Corporation. These 12 Governors of the corporation have submitted an application to USDA, which our Governor in Iowa believes is fully consistent with the language of section 1323. But the USDA says the application cannot be acted on because it is inconsistent with your interim regulation. Do you follow me on that?

Mr. CLARK. I do.

IMPLEMENTING REGULATIONS

Senator HARKIN. Now, that is a real catch-22, because you know that your interim rule does not conform to section 1323 as amended by Congress. So it seems to me that you need to change your rule so you can approve the application that the Governors have already made.

You published your interim regulation, right? Congress said that it was not consistent with the law. Then we amended the law last fall—that was Senator Grassley's amendment—to make sure that you would comply with our intent. You said it would take 6 months to get those amendments into regulation. I know Senator Grassley discussed it with me at that time. We talked about it, and we said, OK, 6 months is 6 months. We went along with it. That was in October.

The 6 months are up. Do you have a copy of the new regulations yet?

Mr. CLARK. We do not.

Senator HARKIN. Might I just ask why?

Mr. CLARK. It is like pushing a string to get regulations through this bureaucracy. I know that is no answer for you, Senator. My point is, though, we can make it work under interim rules. We are not purposely delaying those new regulations that the Rural Development Nonprofit Corporation wants to get in under, I guess, looking for an avenue, something different than what we have proposed now, obviously.

Senator HARKIN. Under your interim rule. But Congress changed that. Don't we have any say in this? Of course, we have some say. This was on a bipartisan basis and was strongly supported on both sides. They changed that interim rule to conform with what we intended in the bill in the first place so that this application could be acted upon.

I am, quite frankly, a little confused right now as to why we cannot get that done.

Mr. CLARK. I am confused too. We have met how many times with your staff and with the staff of Senator Grassley?

Senator HARKIN. We have met innumerable times.

Mr. CLARK. And every time we come back home with another direction in which you and your people want to go. We are getting too many marching orders, I think, and too many suggestions.

Senator HARKIN. So you are saying that it is our fault, that we are giving you too many different directions to go in.

Mr. CLARK. You ought to share a bit of the blame with us, maybe not all of it, but a bit.

Senator HARKIN. I do not know about that, now. We passed the law. You put out the interim regulation. You can correct me if I am wrong, and I will let Senator Grassley get in here, if he wants to, to help me out on this. But it seems that we said that that interim regulation was not right and did not conform with the intent that we had in the law, so we came back and amended the law to make it absolutely crystal clear what that intent was.

In fact, if I remember the discussions at that time, we did not think it would take more than 30 or 60 days. Your department said give us 6 months. I remember arguing about this on the floor. We said OK, 6 months is 6 months; we will do it.

So the law is clear. We passed the regulation, and we passed the change last fall. And it is 6 months later, and we still do not have it. I do not know what the confusion is now. I will grant that we made one change, but the change we made was because we did not agree with the interim regulations.

Ms. LAWRENCE. Senator Harkin, may I interject at this point, please? Maybe I can shed some light on this problem.

TIMELY OBLIGATION OF FUNDS

As late as yesterday, on this subject, I met for the first time since the 1985 bill was passed with the first amendment, I met yesterday for the first time on this issue with the staff at the Farmers Home Administration to find out exactly what the delay is. After going around and around about the statutory and regulatory language, I believe that we have narrowed down the problems on the new amendments that were made in the last Congress. Only a couple of technical problems remain.

We have agreed to have the attorneys at the department and the attorneys on the Senate staff meet to determine how we can correct these problems so that we can finalize the regulations in such a timely manner that, indeed, we can obligate some of the money this year.

The department is committed to this rural development program. There has been all of the normal and typically outrageous bureaucratic foot-dragging on this issue. I will concede that. You are absolutely correct, that the interim regulation does not answer at all the problem that Senator Grassley addressed in the amendment in the last Congress. We intend to find a way to make the program work this year. You have my pledge on that.

Senator HARKIN. I appreciate that. You said you met for the first time yesterday with the Farmers Home staff to discuss this problem and you have narrowed it down to two technical problems.

Ms. LAWRENCE. That is right.

Senator HARKIN. Then you say you are getting your attorneys at the department to meet, I assume, with these Farmers Home people to iron these out.

Ms. LAWRENCE. As a matter of fact, the associate administrator of Farmers Home and the OGC, our own counsel's office, and some attorneys from the Senate staff will meet this morning at 11:45 to see if we can find a solution to the technical problems.

Senator HARKIN. That is good if, in fact, you are going to make some progress on this. I hope they are going to make some progress.

Ms. LAWRENCE. Thank you. I apologize for interrupting. But it happens to be a program I want to see in place too, so I have a vested interest of my own.

GUARANTEEING FINANCE CORPORATION LOANS

Senator HARKIN. Good. Ms. Lawrence, I hope they do move rapidly. I have just one other point I want to make about why the Governors and our states are getting quite upset about this and we are hearing from them. Evidently, USDA had made known to these 12 Governors and the corporation that if they could locate loan funds for their program during this 6-month period, then you could initiate the loan guarantee portion of 1323 under the interim rule.

Ms. LAWRENCE. That is so.

Senator HARKIN. I have a letter here from the principal group in Des Moines to Neil Nathanson, CEO of the National Rural Development Finance Corporation, dated February 18, saying that they would consider a $20 million investment. They have the full $20 million. But evidently when they brought the letter in to you for the guarantee, they were told it could not be done.

This is the point I want to make to both of you, to see if you are tracking on this. They were told that USDA would have to review and approve each individual project rather than guarantee national loans for relending to the state development programs.

Senator GRASSLEY. I think maybe I can help out on that a little bit. I think the information you presented is very accurate. I think there were some later followup conversations between the people in Des Moines and the people at Farmers Home that said that the original analysis of it could be ignored and that we could still go forward.

Ms. LAWRENCE. You are getting into technicalities, Senators, with which I am not familiar, so I am relying on staff.

Senator HARKIN. There is a real catch-22 in this. As soon as you get briefed, I will continue with what I consider to be a catch-22 provision of this. Maybe I do not have to go on if this has been done.

Senator GRASSLEY. I think it would be important that we would have their analysis, if my statement of that is accurate, because I want it to be accurate and I believe it to be accurate. But if I am wrong, I want to be told I am wrong.

Mr. CLARK. We have repeatedly offered to work with the corporation on a case-by-case basis: tell us what you want to do, and why can you not get into the guaranteed portion prior to getting into the grant section. We want to work with them, but we have not yet had that definitive proposal put to us.

Senator GRASSLEY. The practical answer to that, Mr. Clark, is that we cannot move in because if we do this early, we will not get the lower interest rate because we do not have the capability of blending the money that will happen when the grant money is put into the revolving fund. That is very important for these programs to work.

Mr. CLARK. My personal view is, we need to make this program work where it has some benefit out in rural America. All of this administrative umbrella we are putting up has little benefit in rural areas. What is going to come out of the end of that pipeline? I am determined to make the program work that way.

Senator HARKIN. Again, as I said, what are we going to tell our Governors? Some of them have already asked for it; they have received program matching funds from the state legislatures? If they spend the money now, they will not be able to use it for matching later on. As Senator Grassley said, they can blend it down and get that lower interest rate.

PURPOSE OF FINANCE CORPORATION PROGRAM

Senator GRASSLEY. Mr. Clark, I think you have to change some of your thinking on that point, because this effort that is coming from the department to put $14 million into technical assistance for a $20 million program is just not a good investment of the taxpayers' money.

We are talking about a one-time program. Senator Harkin and I worked on this. And do not forget that we had Senator Cochran, we had Senator Burdick, we had Senator Stennis. We are talking about all the members of this subcommittee, and all of us are very much interested in this transition from people who cannot farm to other occupations and helping that transition both with the creation of jobs and with job retraining. We are talking about a one-time program; we are not talking about an ongoing program.

This money was reprogrammed from a program that was not working in another department to your department, because we feel that you are the best one of all the bureaucracies to understand the problems of rural America and the best bureaucracy to carry it out. A one-shot program and a revolving fund is the best way to have an ongoing program with a one-time investment of the taxpayers' money. That is what we are after here.

I think that you have shown more cooperation this morning than I anticipated you would, and I want to compliment you on that. Mrs. Lawrence was in my office yesterday and showed a very cooperative atmosphere. I think the announcement this morning that there is going to be a meeting among staff within the next hour or so is very indicative of a cooperative atmosphere that I did not anticipate we would have and that I am pleased to have. If that can continue, and as you indicated you want to make this program work, I believe it can be made to work.

But I believe somewhere it may be beyond your control. As you said, getting regulations through is an awful problem. It is a sad commentary, too, what you said, in a sense, not of your ability but of any political appointee to get the job done. But I think it is on your shoulders, with our help, to push harder.

I am willing to come down there to USDA and walk those regulations around and, for the first time in my life, see it demonstrated of what it takes to get regulations through. If it is a frustration to you, I am not going to stand for that frustration.

Thank you.

Senator BURDICK. Is there anything else on that subject?

Senator HARKIN. I second that.

Senator GRASSLEY. I believe I said all I can say on the subject. [Laughter.]

But thank you for this pleasant surprise this morning.

Senator HARKIN. I heard you say the meeting is at 11:45, and I hope everything comes out all right. Again, I know that Senator Grassley is going to be on top of this for the next few weeks.

I hope, Mr. Chairman, that it is expedited, that it does come through. Obviously if it does not, I would hope that the subcommittee might want to have these people back up in a few weeks if they do not expedite this program, Mr. Chairman. I know we are all busy, but this is an extremely important program. Perhaps we might want to take another look at it.

Senator GRASSLEY. Would the chairman be willing to do that?

Senator BURDICK. Oh, certainly.

Senator HARKIN. I would appreciate that, and I know Senator Grassley would.

May I ask one other question, Mr. Chairman? Has my time run out?

Senator BURDICK. Please go ahead.

STAFFING CUTS

Senator HARKIN. I had one other thing I would like to ask Mr. Clark. I was doing a study of your budget for next year. There is a cut in staff in Farmers Home Administration of about 1,000. When I look at where they are being cut, there is an interesting pattern that emerges. There is not one GS–15 cut. There is not one GS–14 cut. There are a very few GS–13's cut.

The big cuts take place when we get down to around GS–10, GS–12. Then we see some other big cuts. Down here is another one at GS–6, GS–5, some of these clerical positions. It seems like in the top, thin layer up there, no one is getting cut out, but all of these clerical people down there are getting cut out. Yet the processing time for Farmers Home applications keeps going up all the time.

That brings one or two questions to mind. Are any of these top people going to get cut, or are you going to use them to start processing the loans and paperwork now out in the field? Maybe you are going to send some of them out in the field to start doing some of that work. I know that is sort of a side issue, but when you look at that you see that nothing out of the top is going but everything out of the bottom.

Mr. CLARK. Now you know who does the work in government.

It is in the field, Senator. That is where the loanmaking and loanservicing of our housing programs are. The district office covers multifamily housing and the water and waste programs, that type of activity. Business and industry loan requests usually come in through the district office to the state.

So the numbers do reflect the reality of the cuts. That is where the farm and housing loanmaking process is: in the county offices, so it is the lower grade jobs, not the higher grade jobs that would be affected most because of a reduction in new housing loans.

Senator HARKIN. And that is what they are cutting out. I just wanted to make that point. It does not seem to make sense to me to cut those people out.

Mr. CLARK. If you look at the pro rata share, you will see that there are cuts up there too.

Senator HARKIN. I see that there were 30 cuts out of GS–13, none out of GS–15 or GS–14, and 30 out of GS–13 and it looks like about 100 out of GS–12. But when you get down to the lower ranks, that is where the bulk of the 1,000 comes from. Less than GS–12, that is where the bulk comes from. And those are the people out there in the field—not the management people in Washington.

Mr. CLARK. You have to realize where our staff is located. You know, 88 percent of our staff is out in the field; it is not in the national office. We have only about 500 people in Washington.

Senator HARKIN. Why do you not cut 10 percent of your GS–15's out, because you cut out 10 percent of your GS–6's and 10 percent of you GS–9's. Cut out 10 percent of your GS–15's: go from 80 down to 72.

Mr. CLARK. We project 26 cuts in the national office.

Senator HARKIN. Thank you, Mr. Chairman.

Senator BURDICK. The Senator from Wisconsin?

SERVICING LETTERS

Senator KASTEN. Mr. Chairman, thank you very much.

Mr. Clark, my understanding is that the Farmers Home Administration is now in the process of mailing out roughly 26,000 letters to farmers who are behind in their loans. These are not letters that threaten adverse action but, instead, request that the borrowers contact the FmHA to discuss servicing of options including rescheduling, asset sales, refinancing, et cetera. Is that correct?

Mr. CLARK. That is correct.

Senator KASTEN. Last year, you mailed out similar letters. I wanted to ask you to share the results of last year's program with the subcommittee, on a national basis and also for Wisconsin. I do not know if you have the figures handy here; you can follow up for the record.

Basically my question is: Supposing that a farmer does not respond within 30 days to these so-called servicing letters. How long would it take this year, and how long did it take last year, before the farmer got formal notice of intent to take adverse action? How many, or what percentage roughly, of farmers failed to respond to last year's letters? And then what happened and what was the result?

I understand what you are doing, and I think this year people might have a better understanding of what you are doing because last year there was an awful lot of panic and people who were confused and who did not understand exactly what you were doing and how you were doing it. There were examples where people, in fact, came in and received help, and everyone, by working together, was able to make some steps forward.

Please give us a report in terms of numbers or percentages of how many people responded, what happened to them, and, for the people who did not respond, what kind of adverse action was taken.

Mr. CLARK. You are correct. Those 26,000 letters are being mailed this month, if they weren't mailed the end of last month. They tell those borrowers: You are 1 year delinquent, $100 or more delinquent; you need now to pay attention to this account; please come in, let's talk about it; here are the options you may want us to consider; check the box and mail it back. If they check the box that they want the loan reamortized, we will consider that they want to come in and sit down and talk about that reamortization.

We will do anything within our regulations and law to keep that borrower going. If he has another chance to make it, we want to help him do that.

SERVICING RESULTS

We did resolve some 36,000 accounts last year through various means. Four thousand of our borrowers came in and paid their delinquencies. You might ask where did they get the money. I do not know, but they found money somewhere to pay off their delinquencies. We restructured, we refinanced at limited resource rates, we lowered their interest costs and made them cash flow, and we kept them going. There were 7,800 accounts for which we did that last year. We did a lot of deferrals. A lot of those things did happen.

There were 4,400 liquidations last year, too, among those 62,000 letters that we sent out.

With all of these actions, we saved over 51.5 percent of those accounts; some 18,000 were saved. We did something to keep them going and in business. But there are yet about 26,000 out there unresolved. We have not made a case for them or they have not made the case for us, to keep them going or move toward liquidation. So those are still pending.

But of the 62,000, 36,000 were resolved and we have another 26,000 we are still working on. The 26,000 we are talking about now are new letters, new borrowers.

Senator KASTEN. The number is just a happenstance. You have got 26,000 people who are receiving the letter now. Are some of those part of the old 26,000?

Mr. CLARK. No; these are brand new delinquencies.

Senator KASTEN. These are new delinquencies.

Going back to my question: Of the people who last year did not respond to this so-called servicing letter, what group of them did you in fact take adverse action against?

ADVERSE ACTION

Mr. CLARK. We did send acceleration notices to some 9,800 borrowers saying we have no alternative but to initiate proceedings to recover our security. In other words, they are pending settlements, foreclosures, voluntary liquidations or whatever.

Senator KASTEN. I do not disagree with what you are trying to do, and I understand that you have made some progress. But I think it is important that we concentrate on informing and working with the borrowers in these areas of servicing options, rescheduling, asset sales, refinancing at lower interest rates, and do not get into the position where, in effect, the person walks in and says, well, because you did not report to us 20 days ago, therefore you are no longer eligible for these options that we have been presenting to our other clients and we now find ourselves in the position of simply slamming the door in your face. That is not happening, is that correct?

Mr. CLARK. That is not the instruction to the field. I hope that is not happening. In fact, we had a rather hardnosed rule: Once we start liquidation, if you come in 2 weeks later and want to pay us off, you cannot do it because we have started the processing. That is ridiculous. If we have accelerated an account and 2 months later he wants to pay us off, let's take it. I think you will find us more understanding than perhaps the perception is out there in the field.

CONSERVATION RESERVE

Senator KASTEN. I thank you for that answer, and I look forward to working with you if we have some particular problems.

Let me switch a little bit. Sales of farmland and farms acquired by FmHA are a source of concern to farmers in our state who fear that the sales might drive down the land prices even further, particularly the prices in the immediate area. I understand you are caught in a no-win situation.

But let me suggest to you that there might be a way to do that, and that is that you might want to put eligible land held by the FmHA into the conservation reserve program. Actual government outlays would only begin after the land was sold.

Could you outline for this subcommittee the legal and practical obstacles to the idea of moving direct into the conservation reserve program with either all or a portion of the land that you presently have in your inventory?

Mr. CLARK. I would agree with you wholeheartedly. There is land out there that should not have been broken to begin with, and it should go into the conservation reserve, either wetlands or fragile lands or whatever. The instructions are in the field. The county supervisors can make that determination in working in concert with the Soil Conservation Service to devise and design a plan for that inventory land so we can do it. I cannot give you numbers of acres where it has happened already.

But you are absolutely right. Why not let it carry over until we sell that land and then let the conservation payments begin?

Senator KASTEN. Do you now have the ability to do that?

Ms. LAWRENCE. No, sir; we do not. We cannot put our property in the conservation reserve. But what we can do and what we are doing is taking our property, particularly property that the Soil Conservation

Service has determined ought not be in crops, and we are putting it into conservation practices such as seeding it with grasses or whatever is determined to be appropriate by the Soil Conservation Service. We are holding that land as part of our inventory. We are not leasing it except where the farm bill requires it to be leased back to the previous owner.

Senator KASTEN. I understand that.

Ms. LAWRENCE. However, Senator Kasten, we have all of these caveats under the farm bill, that a farmer cannot get any kind of government assistance, such as a loan or loan guarantee, if he is in violation of the sodbuster/swampbuster provision. In one way or another, that land will get put back into conservation practices.

Senator KASTEN. I am going to follow this up with your legal experts and with some of our people. But my question was: of the land that is in your inventory, certain land would be eligible. What Ms. Lawrence said is that we then, while still maintaining control of the land, put it into conservation practice.

My question is: Why do we not work out a way to take that land, which I think all of us agree never should have been broken out, and, in a government-to-government transaction, take it out of the FmHA inventory and put it into the conservation reserve program?

I think we could make a case that that might be a less expensive way to do it. Second, we could make a case, I believe, that it would get around that problem that we have got in which the land values are being depressed if you are forced to have a wholesale sale of four or five farms in a particular area. We see that affecting all of the land values, and we end up with land that never should have been in agriculture continuing in agriculture.

Mr. CLARK. There are instructions on this in our field offices. The county supervisors can work with the Soil Conservation Service. They can recognize that yes, these 200 acres should be in the conservation reserve.

Senator KASTEN. Then can they put it into the conservation reserve program?

CONSERVATION RESERVE PAYMENTS

Mr. CLARK. They can get a commitment, I think.

Ms. LAWRENCE. I see where you are going, Senator Kasten. If the land were in the conservation reserve, then when it was finally sold out of our inventory, the farmer who bought it would get the conservation reserve payment. That is where we are eventually trying to head, not only with our inventory but, indeed, with all farm lenders including the bankers and the Farm Credit System, who would also like to put their inventory into the conservation reserve. They are not allowed to do it either, any more than we are.

Farmers Home, fortunately I think, has found a back-door way to it. We will go ahead and put the land in conserving practice, and when we sell the land, the farmer to whom we sell it can put it into the conservation reserve program and get the payments.

Senator KASTEN. Or he can choose not to do that.

Ms. LAWRENCE. He can choose not to, you are right.

Senator KASTEN. That is exactly the point, that at one point we have to attach the conservation reserve participation to the land as it is sold or passed on to the next person.

Mr. Chairman, I think we all understand each other, and I am pleased, because I think there is a general agreement here that what we are talking about is something that would be desirable. I will follow up with Mr. Clark and others in terms of trying to develop a way through this, and if other legislation is needed I would like to be helpful.

Mr. Chairman, thank you very much.

Senator BURDICK. Senator Grassley?

ADVANCED DEFICIENCY PAYMENTS

Senator GRASSLEY. Mr. Clark, I assume the advanced deficiency payment has something to do with your workload being a little bit less. Is that true?

But more importantly, looking into the future, next year there is not any plan for an advanced deficiency payment. So considering the cutback in staff, what do you see for next year from the standpoint that we will not have a deficiency payment? Presumably there will be more demand for loans for Farmers Home Administration and cutback in staff.

Mr. CLARK. The staff we are proposing to cut, Senator Grassley, are those directly charged with booking and obligating rural housing loans. It has nothing to do with the farm program. We think the staff numbers are all right.

Senator GRASSLEY. Then from that standpoint, do you see any particular problems with the fact that we do not have advanced deficiency payments scheduled for next year?

Mr. CLARK. We see less demand for dollars this year because of the advanced deficiency payments. You are right. Why borrow money? In fact, we will not loan one of our applicants money if we can identify the deficiency payments coming in. He should not borrow money he does not need. It will affect, I think, the dollar amount. More dollars would be required if there were no advanced deficiency payments.

Senator GRASSLEY. On another point, I had the same question that the chairman had and Senator Kasten had about land coming from inventory back into sale. I am not going to raise that, because that has been adequately discussed. But I do want to make my point that I hope that you do that very carefully, and I think you have indicated to us that you are inclined to be very careful in how you are doing that.

I guess there is still a feeling that the bottom has not been reached yet in farmland, although I hope it is very close. Even if there was not anything put back on sale for the next years, I do not think it would hurt government policy and it surely would not hurt the local economy to any extent.

DEBT WRITEOFF

Now to my last question, this deals with 1309(d) of the 1985 farm bill. I believe that was meant to allow you to write off debt if that would be, in your judgment, what would make the most sense. Is the Farmers Home Administration, under section 1309(d) writing off any debt?

Mr. CLARK. We have that ability out now in the field on liquidations. We have increased the authority of the state directors for debt settlements. Anything over $25,000 had to come back into the national office in years past. That threshold is too low. Now, we will allow $150,000 for the state. That state director can agree to forgive that debt when it gets to the point of liquidation. That is now happening regularly.

Senator GRASSLEY. Let me read to you a scenario that I believe would be a typical one taking place in the state of Iowa. Then the bottom line is whether or not you can do anything to change this and particularly if section 1309(d) does not give you the allowance to make the change.

In this particular scenario, in the first place you cannot do anything until you accelerate a loan. Then you have to go through the hearing and proposal process, and even then you do not allow the Farmers Home Administration to write off debt. The farmer is then given the opportunity to somehow buy off his loan, usually through alternative financing from another lender. If he cannot do that, you foreclose on him or he just gives his land back to you. After all this, the farmer gets the option to lease back or buy back his land, and only then is there a possibility of reducing his debt load.

Now, that does not make a whole lot of sense to me when maybe in the very beginning, by just reducing his debt to a realistically workable level, the farmer could have survived. That is my question: Whether or not that is a typical practice. It is my belief that is in my state. Can you change that? Does 1309(d) allow you to change that? If it does, then I guess I would urge you to change it.

Mr. CLARK. Yes; that is a possibility. The Farm Credit System in St. Paul is now experimenting with that approach in their real estate loans. We think there may be some points in that pilot program that we might adapt into our system. We are taking a look at it.

Senator GRASSLEY. For gosh sakes, do not follow the Farm Credit System. As badly as government is disrespected, it has reached the point where now among the farming community the Farm Credit System is less respected. So do it on your own, I would suggest. [Laughter.]

FORECLOSURE MORATORIUM

Would it not be appropriate, then, while you are looking, to hold off in any use of this procedure that you are presently using?

Mr. CLARK. You know, we suffered terribly during that moratorium we had that lasted 2-plus years. That did terrible things to us, not being able to move that land. I would be reluctant to do that.

What you are suggesting is a big, broad brush again. I am sure you might hit 10 percent out there that might benefit from a moratorium, but the other 90 percent really should not have the benefit. That bothers me a little bit.

Senator GRASSLEY. Then Congress wrote 1309(d) 18 months ago. Do you even have to talk about a timetable? You are just now looking at this. How long is it going to take to get it looked at and decide that you are doing it all right or you ought to change it? But I think you have to read into that congressional intent that you change your practice.

IMPLEMENTATION OF DEBT WRITEOFF

Mr. CLARK. I really do not want to commit to a timetable, Senator. In fact, it would be impossible to commit to a timetable to you. Three or four months would be a minimum. We have so many other regulations to write. The farm bill turned up 100 changes that we had to put in our regulations, and we are just now beginning to recover from that blow. It is going to take time.

I know you do not have that high a regard for the Farm Credit System, but we need to know what their experience is. We are looking at that. We are having our economic research people take a look at the benefit of this as well.

We want to be helpful. The last thing I want to do is to build up our inventory of land. We do not want that land in our inventory. If there is any chance of keeping those operators on that land, we want to do that. If we can set aside perhaps something in our real estate loans, I think we ought to consider it and we will.

Senator GRASSLEY. I will follow up with you.

I am done, Mr. Chairman, but let me indicate that just 2 years ago the Farm Credit System was the most respected of farm institutions, at least in the Midwest. So it has deteriorated very rapidly. I hope they can regain that respect. Thank you, Mr. Chairman.

Senator BURDICK. Senator McClure.

DISPOSAL OF LAND

Senator MCCLURE. Thank you, Mr. Chairman.

Mr. Clark, I want to follow up a little on this land disposal question. If I understood you correctly, you just responded by saying that the moratorium did terrible things to us. What terrible things did it do?

Mr. CLARK. It did terrible things, I think, to the borrowers more perhaps than this agency. I think it implied some false hope for many of those farmers out there with that moratorium. That overburdening debt was still upon them after the moratorium expired, and we had no alternative but to go on with those foreclosure procedures.

Senator MCCLURE. You were talking about the moratorium on foreclosures.

Mr. CLARK. I was.

Senator MCCLURE. You were not talking about the moratorium on disposal of land.

Mr. CLARK. No.

Senator McClure. I want to explore that just a little bit because I am not quite certain that I understand the sense of urgency on the part of government, if I can ask you to detach yourself for a moment from Farmers Home and talk about USDA or even the U.S. Government. Why is it a good government policy to have two different programs running at directly contrary courses? One is that you foreclose on property, you acquired it, and put it in your inventory, and you want to dispose of it. The other is that as a matter of policy, the government is paying other farmers to get out of production.

Mr. Clark. If you put a pure, cold percentage to numbers, I think you would find that no matter what you do, if you keep that farmer on the land, he is so overburdened with debt that he cannot keep going. The seed company will not give him seed to plant. He cannot get fuel. That means he needs more debt. He has to borrow more funds to keep going. Even if you quadruple the price of commodities, he will never escape from that burden. He will never survive.

Senator McClure. I am talking about the inventory of land that you acquire which you then lease or sell. At the same time we have government that is paying other farmers to get out of production. Why are you so anxious to get the land back into production?

Mr. Clark. We review each situation on a case-by-case basis. If there is land that needs to be kept in production through lease, we will do that. There are unique positions—for example, cotton allotments. If we lose the cotton allotments on some of our southeastern land, the value deteriorates. We need to do things to keep that going.

However, it costs us about $135 million now to keep that land in our inventory. We pay taxes in some states. They do not charge you, I think, in your state; but I think they are beginning to. We have to pay taxes, keep the fence lines up and maintain the outbuildings. It is a big burden to keep that inventory going. If you lease it out and then encourage deficiency payments, it even costs the taxpayers more money. It might be $3 an acre more.

Senator McClure. Your answer would be, "Let's sell it to somebody and then they can get paid to divert it"?

Mr. Clark. The end result in many cases would be the same, I am sure. Hopefully, conservation practice would enter into that as well.

RETENTION OF INVENTORY LAND

Senator McClure. I understand the question Senator Kasten was asking with respect to certain classes of land, but for other reasons we want to get into a conservation practice.

One of the thrusts of the farm legislation is to reduce total production by diverting some acres from production. Unless the land is in a concentrated and particular area, where it has local economic impact; unless the land for some particular reason, like maintenance of allotment, needs to be back into production, why should the Government contribute to the surplus that we are trying to buy our way out of through other programs? Why should you not maintain the inventory that you have unless there are peculiar or specific reasons why not?

Mr. Clark. You are suggesting that we indeed hold that land and not sell it?

Senator McClure. That is correct.

Mr. Clark. I am sure you will have constituents in your state clamoring that government should not do this. Why should the government be a landowner?

Senator McClure. Yes; indeed I do.

Mr. Clark. And then you make exceptions, but where do you make the exceptions?

Senator McClure. I ask them the same question that I am asking you. I remember back to an earlier farm program when indeed people put their land in the soilbank and then they sold the land to somebody else and used the soil bank payments to pay for the land. We are getting back into the same thing again.

I do not understand why we have two programs. The taxpayers wonder about that $26 billion a year we spend on farm programs, and indeed, they should wonder. They should ask questions about whether it is making any real difference or if it is simply tiding people over for one more year, providing no permanent solutions.

One facet of the program says take land out of production; another agency of government is trying their best to get land back into production.

Mr. Clark. I guess we are both making cases for a free market, are we not?

Senator McClure. More so than we have now.

Mr. Clark. I would agree with you.

Senator McClure. I am concerned about it, because I really do not see the utility of the practice that we have now. When land is taken out of production already, you have one farmer who has already changed his lifestyle; he has been eliminated from farming; you have foreclosed on his land, and that farm family is already affected. Then we are going to turn around and say, now we are going to affect another farm family by inducing them to get out of production too.

You have got one set of machinery that has already been sold; now you are going to have another farmer go out of production and have another set of machinery to sell. I cannot believe we can do this without affecting the commodity price of the machinery and the market value of the land.

I have talked to our own administrator, and he thinks he can sell all the land that his agency now has in inventory without depressing the market. But I would agree with Senator Grassley. I do not think the market price of land has yet bottomed out, if indeed it is still declining. It is under a downward pressure because of its capital realization value and, after all, that is all it has, other than speculation.

If they cannot make a living on that land now, if they cannot make a profit on their investment on that land now, then the pressure must inevitably still be downward on land value. If the government owns a significant or even marginal supply of land in an area and they put that on the market, it certainly has to make that pressure even worse.

If you depress prices even further, then you have got some farmers who, at the margin, are already at a debt equity ratio problem. If you depress their equity even further by reducing the land value, you have created another class of troubled farmers by government action.

OPPOSING GOVERNMENT PROGRAMS

I am trying to sort out in my mind the rational connection between programs that seem to me to be working opposite to each other rather than in support of each other. If we believe in land diversion, then let's divert land. If we do not believe in land diversion, then let's get out of the land diversion and let the market price do whatever it does to farmers. But we are doing both now.

No wonder that $26 billion a year is not really helping a lot of farmers in any permanent solution. It tides them over one more year but does not provide any long-term answers.

Mr. CLARK. I would point out to you, Senator McClure, that we do not hold a significant amount of land. It is very little land. That 1.7 million acres is insignificant compared to the total farmland in America.

Senator McCLURE. There is no question that it is. But I still wonder, even if it is insignificant, why we should add that insignificant burden to a program that is already burdened.

Mr. CLARK. I guess I like a level playing field. Should the Farm Credit System be able to sell land? Should the other independent banks and insurance companies be on the market selling land? I guess the taxpayer, overall, is stuck with the inventory property.

Senator McCLURE. They are paying for it one way or another. The question is whether they are going to pay it two or more ways, as I see it.

AVAILABILITY OF OPERATING LOANS

Let me shift for just a moment with respect to the shift of funds to provide farmers with operating funds in spring planting. As I understand it, you said earlier you really did not want to shift funds into this quarter; you wanted to wait until the next quarter. Am I correct?

Mr. CLARK. I would rather, yes, but we are going to do it, with some caveats.

Senator McCLURE. I think it is needed, because if you wait until the next quarter, you may help those guys who are double-cropping but you are not going to help the fellows for spring planting. I do not know which segment of agriculture we are trying to help; but if we wait, you disadvantage those who are in the northern tier of states and you advantage those who are in the southern tier. I live in the northern tier, so I am not really anxious to help those who are double-cropping at the expense of my fellows who do not have that opportunity.

Senator Cochran, I think you would agree.

Senator COCHRAN. Would the Senator yield? [Laughter.]

Senator McCLURE. All we want is a level playing field.

The Idaho Farmers Home office has been working with bankers in Idaho to encourage them to use the guaranteed loan programs to further the administration's program to decrease direct lending in Farmers Home. Thus far, the banks have not shown much interest in utilizing the program. Unless changes are made to the program, I would foresee a continued nonuse of the program. Why continue to increase guaranteed funds for a program that is not working?

GUARANTEED LOANS

Mr. CLARK. That is not true nationwide, Senator. It is working. We booked twice as many guaranteed loans at twice as many dollars this year as we did last year. It is growing by leaps and bounds over 3 or 4 years ago.

In your particular state, it is a tough sell out there to those bankers. I believe you have some regional bankers out there who are attempting to turn their backs on agriculture. They cannot do that. I try to tell my fellow bankers: You cannot turn your backs on agriculture; it is the basis of our finance; if agriculture fails, your credit cards, your automobile loans and your single-family loans in the city are not going to be worth a tinker's damn; the whole bank is going to fail.

Senator MCCLURE. Do you believe that the guaranteed loan program will absorb all of the money that has been programmed for it this year?

Mr. CLARK. I would like to hope so. We did not do it last year, but I think we are making great headway this year.

Again, we have the American Bankers Association, and the Independent Bankers Association of America working with us. The Farm Credit System is now coming aboard with our guaranteed program. You have to remember, now, that they have hardly been players at all in the last few years. They are now climbing aboard. They see the value of up to 90 percent guarantee in their portfolio. Looking back, I am sure they wish they had had that guarantee before all those bad loans surfaced.

So I think we are making significant headway, and we are going to keep pushing and hard-selling wherever we can.

Senator MCCLURE. I do not object to that. I would like to see them use it. But in my state, we used 99.4 percent of the insured loan funds and only 9.3 percent of the guaranteed loan funds. Is there not a way in which, if that pattern persists, that you could make some of that money available by transfer?

Mr. CLARK. If you send the wrong signal to the field, it is like opening the gates of the dam. The demand will always equal or exceed the funds that you put out there on a direct basis. We even had people waiting. They like that security blanket of our system at low interest rates, and they will not take a chance with a private lender.

The interest buy-down was supposedly to meet some of those needs. The interest buy-down feature is working. We booked a significant number of loans this year. So far, we have booked 718 loans for a total of about $100 million. We have turned up $5.9 million in interest subsidy commitments to those banks that are part of the interest buy-down program. So I think it will work.

Incidentally, Senator, I would love to join you in your state. I will come out and meet with you and the bankers and see if we cannot impress them, about their importance in our economic ability and stability out there.

Senator McClure. I appreciate the offer, and that is one that I may well take, because I do not think they are doing what they can and should do.

But I am worried about the farmers on the other end of that. If the banks will not do it and we cannot induce them to do it, the farmers would be better off to get an insured loan if the banks will not participate in the other program. And if the money is available, the farmers ought to have some access to it.

I am worried about the availability of operating cash to farmers who are going to have to close down if they cannot get it. I am not going to say the banks are doing the best job they could possibly do; perhaps they are not. I would join in criticism. But I hate to see the farmer be the guy who is stuck by that failure. That is what I see happening right now.

FARM CREDIT SYSTEM

So I would join with you in efforts to try to persuade the banks to use the program. But if they do not, I would like to see the money available to the farmer. That is my concern. I join Senator Grassley with his criticism of the Farm Credit System.

As I see the Farm Credit System, it is really being utilized to bail out banks, not to help farmers. I will prove that by the statistics of the transfer of kinds of loans. The banks are shifting all their bad loans over to the Farm Credit System and buying away all the good loans from the Farm Credit System, and that shift is marked by all of the statistics.

The result is that the Farm Credit System is going down the tubes and the banks are getting fat. I do not like that. I do not think you like that either. But I think it is statistically provable that it is a fact.

And I am very much concerned that the maintenance of that program is also going to lead to a very big tap on the treasury to bail out the Farm Credit System. That is just as inevitable as the sun coming up tomorrow morning.

Mr. Clark. You should continue with the shift, because the shift also comes to us from the Farm Credit System. We have to realize that it takes cooperation from the Farm Credit System, the bankers and the Farmers Home Administration. None of us can do it alone.

Senator McClure. I agree.

Mr. Clark. We need to cooperate and get viable farmers the credit they need.

Senator McClure. Mr. Clark, I agree with you, and I think that is your struggle and mine. What we are trying to do is take the law that we have, make it work if we can, adjust it where we have to, find out where as a matter of fact it is not working.

Yes; I will agree with you. In some areas of the country the guaranteed loan program is working. But I live in the Northwest. It is not just Idaho; Oregon and Washington are in the same boat. For whatever reason, in that particular region of the country it is not working at all. But let's recognize that it is not working and make an adjustment rather than stubbornly cling to the notion that it ought to work and somehow we can force the bankers to make it work when we are finding that they do not move.

CHAPTER 12 EFFECTS

The commercial banks have been encouraged by Congress and the administration to use the guaranteed loan programs for farmers who they would not have lent to without the guarantee. With the new ruling by USDA's Office of General Counsel regarding nonpayment for 3 to 5 years on a Farmer's Home guarantee for a farmer filing Chapter 12 bankruptcy, and continued slow processing of guaranteed loans even with the approved lender program, it appears that the rapid transfer of Farmers Home lending from direct to guaranteed lending may cause severe disruption of lending to viable farmers in the near future.

How does Farmers Home plan to handle these problems and maintain the viable farmers that they now have booked?

Mr. CLARK. You will get no argument out of me on that, Senator McClure. We have recognized that possibility. Many lenders are scurrying off in the corners because of Chapter 12, saying we are not going to do it.

We recognize that might be a weakness in our guarantee program. We should be able to recognize, when a Chapter 12 proposal is confirmed, that there is a loss out there for the lender. We should be able to make an advanced payment on that loss, and we are proposing changes in our program to do just that. We can do that now in our guaranteed programs in other sections, but not Chapter 12.

We are going to change our regulations and make advance payments. If indeed, when it is finalized, the bank does not incur all of that loss, then they need to pay us back with interest, I think, and they will be agreeable to do that. We are working with the banking association to make that come about.

Senator MCCLURE. Incidentally, I appreciate that answer, because I think that is one of the indications, the adaptation to existing conditions, I think we simply must use in a whole lot of different areas. Where practice does not meet theory, let's find out why and what adjustments can be made.

FARM CREDIT INSOLVENCY

As I mentioned earlier, I believe the Farm Credit System is in such serious trouble that it is inevitable that there is going to be additional federal legislation to prevent insolvency of several bank systems. What implications would this have on the funding needs for Farmers Home?

Ms. LAWRENCE. Senator, it is hard to tell. If indeed the legislation you speak of comes to pass, it probably will not have any impact on Farmers Home. In other words, if the system stays up and running, it should not have any impact on Farmers Home.

Senator McClure. You do not think it will have any measurable effect upon the transfer of loan portfolios?

Ms. Lawrence. No, sir; I do not.

Senator McClure. You do not think it will have any impact upon the congressional willingness to divide the pie in a way that would help or hurt?

Ms. Lawrence. I would hope sincerely that the Congress will leave Farmers Home Administration separate from any farm credit legislation, that we not link the two in any way.

Senator McClure. I hear your hope expressed. That is spread upon the record. Now let's go beyond the hope to a reality. There is a law called Gramm-Rudman-Hollings that says you cannot spend money you do not have. Congress is trying to reduce the deficit to $108 billion next year. Isn't that great: only $108 billion deficit? That requires over $60 billion of further cuts from existing programs.

If the Farm Credit System banks require a financial infusion, where is it going to come from? You have expressed the hope that you will be left out of that. That reminds me a little bit of a visit I had with the government of Lebanon a few years ago. With all of this going on around them in the Middle East, they persisted in believing that could all happen around them and nothing would ever touch them.

I suggest you are about like the government of Lebanon right now. If you have all of this collapse right around you, it is going to affect you.

Ms. Lawrence. I agree with you, Senator. If it collapses, we will absolutely have to take on borrowers as a lender of last resort. Maybe I was not communicating well with you.

If it comes to pass—and I hope it is not necessary, but I see it as you do, that it seems inevitable—that in some way we are going to have to do something else with the Farm Credit System this year. Depending on how that is structured will depend on whether the system is able to stay with its borrowers and whether its good borrowers will stay with the system so that they can continue. If the good borrowers flee, needless to say, they are not going to be able to continue.

Senator McClure. I also think that other side of it is a very important side. Those of us who come from farm states and are concerned about farm problems are going to try to do what has to be done to save the Farm Credit System without damaging the Farmers Home Administration.

Ms. Lawrence. That was the point I was trying to make. Hopefully, in whatever form the assistance is structured, the form becomes paramount because of the potential impact on the Farmers Home Administration.

I guess the point I was trying to make, and did not make too well, was that I hope as we work together on structuring whatever needs to be done to the system that it does not have a negative impact on the Farmers Home Administration.

Senator McClure. Again, I do not want to overstate this, and obviously the Congress will make an ultimate decision, but there are only so many dollars in the federal budget. If some of that money has to go for bailing out the Farm Credit System, some of it may be taken away from your programs.

Mr. CLARK. We are volunteering our housing program for that effort. [Laughter.]

Senator MCCLURE. I hear you.

I would ask you to consider, too, volunteering not putting land back into production that will then have to be paid to be diverted. That is not your pot, but that is another pot. They are interconnected, believe it or not. If other programs cost more, there may be less for you.

Mr. CLARK. We appreciate that, Senator.

Senator MCCLURE. Thank you, Mr. Chairman.

Senator BURDICK. Senator Cochran.

Senator COCHRAN. Thank you, Mr. Chairman.

Now let me tell you about double-cropping. [Laughter.]

Senator COCHRAN. I wanted to say—and I know you have been here quite a while—that I understand Katheen Lawrence announced this morning that she was going to be resigning. I want to compliment her on her service to the Department of Agriculture and on her help to this committee. During my time as chairman of the subcommittee, I found her to be very helpful in many ways, particularly in trying to provide information to us and to assist in the process of deciding on the adequate levels of funding for various programs under the jurisdiction of her office. I am going to miss working with her, and I know that other members of the subcommittee will too.

I want to take advantage of this opportunity to congratulate you for the work you have done and to wish you well in the future.

Ms. LAWRENCE. Thank you very much, Senator. I appreciate it.

Senator BURDICK. I second the motion.

CONSERVATION EASEMENT

Senator COCHRAN. I hope before you leave we can get a conservation easement program implemented in an effort to try to help those landowners and borrowers from the system who are being encouraged by circumstances to continue to farm marginal land and lands that are really not suited for the profitable production of crops.

To try to help solve that problem, we wrote into the 1985 farm bill authority for a conservation easement program. I do not think regulations have been finalized; although I understand that a pilot program is being undertaken in the state of Mississippi, which pleases me. This pilot program will test the regulations to ensure that they will be workable and that they will implement the program in the way it was designed—to not only help distressed farmers out of a jam, but also to put land to a better use, to a conservation use, for instance to wildlife habitat. Future generations would then be able to enjoy that land, and farmers who, by circumstances, have had to continue to farm that land that is not productive would not be forced into bankruptcy. So I hope we can see that program implemented.

What is the status of that? Do I understand correctly that we do have a pilot program under way? What is the outlook?

Mr. CLARK. Yes, we do, not only in your state of Mississippi but in Ohio as well. We are going to launch the one in Ohio on March 30; we will launch that field test on April 6 in your state. It is a mutual understanding between ourselves and the Wildlife Service.

So we think there are great possibilities of that program going forward. We have the Soil Conservation Service, Fish and Wildlife Service, Forest Service, American Farmland Trust and the conservation groups are being invited to be part of that easement team. We think we are headed in the right direction, and I am optimistic that that is going to surface as a very viable program.

CHAPTER 12

Senator COCHRAN. There are two problems that I want to bring to your attention very briefly. One is the interpretation by the Farmers Home Administration of the phrase, "cash collateral," in Chapter 12 proceedings. The new bankruptcy Chapter 12 is being utilized now by farmers to try to relieve themselves of the burden of debt and continue to operate if it can be shown to the satisfaction of the bankruptcy court that there is a chance that they can work their way out of an indebtedness problem.

It is my understanding that in my state the Farmers Home Administration has not made a decision about its position with respect to cash collateral in these proceedings. It has not been determined whether cash collateral will be permitted to be used by the borrower, or the petitioner in the bankruptcy case, so that he can continue to operate, or whether Farmers Home Administration is going to claim the available cash that the borrower has access to and can use it as a credit against his existing indebtedness to the Farmers Home Administration.

My understanding is that the state director has left it up to individual county supervisors to make these decisions. That is unfortunate, I think, and I just bring this to your attention. I have communicated my concern about it to the state director. I do not know whether this is happening nationwide, and that is why I bring it to your attention.

I do not know what the policy is. It is a technical, legal position that the Farmers Home Administration has to decide one way or the other. I suggest that it may be something that is more complicated than just leaving it to the decision of individual county supervisors.

DISASTER PAYMENTS

The other problem I want to bring to your attention is that in some counties the disaster program moneys are being made available to individual farmers. In other counties the Farmers Home Administration has beaten the farmer to the Agricultural Stabilization and Conservation office and has gotten the disaster payment. I am told that by farmers in my state.

That has led to a lot of anger on the part of those who have seen farmers in one county get the disaster money, and then in other counties, if he is a Farmers Home borrower, he cannot get the disaster money. Is there a policy with respect to disaster payments from the ASCS under the current disaster program?

Mr. CLARK. There is a uniform policy. I would suspect you are correct. I would think it is probably different interpretations between counties, and we should clarify that policy. That is not the first time I have heard that, and we are trying to reacquaint our states on that regulation.

PIK certificates are not assignable. However, there could be a right of offset which is paid to us in cash with the balance in PIK certificates going to the borrower. But there should be a uniform application of right of offset. We are going to try to clarify that.

Senator COCHRAN. I just bring those problems to your attention and ask you to look into them for me.

Mr. CLARK. I might make a point, Senator. We do not get a lot of weight in our votes on Chapter 12 hearings. I have not heard about the problems you are mentioning, but we will see what is happening in your state. We are kind of at the mercy of the bankruptcy courts, and we do not have a lot to say about what is going to happen.

Senator COCHRAN. Thank you very much, Mr. Chairman.

Senator BURDICK. The Senator from Idaho?

Senator McCLURE. Mr. Chairman, I have one further question which I deferred.

LOAN APPLICATION FROM KELLOGG, ID

Yesterday I met with members of your staff, Art Bronients, Mike Wilkinson and Glen Bennett, regarding a loan application for the city of Kellogg, ID. Your staff informed me that the city would not be eligible for a consideration under either the Community Facilities Loan Program or the Business and Industry Program.

There has never been a rural city anywhere in the United States in more need or more deserving of these programs than the city of Kellogg. The reason is that it is severely depressed. The city and area people have gotten together and developed a program to revitalize their community. They were counting on funding from one of these programs to put their citizens back to work.

They were seeking a loan, not a grant. I was informed that they were not eligible due to what I believe to be technical interpretations of the regulations. This project is a business for a small community; it is not purely a recreational tourism facility.

After this experience, I am concerned that the programs are not accomplishing the tasks for which they were intended. Do you feel it is necessary to make some changes to the programs so rural communities such as Kellogg can qualify for the assistance they so desperately need?

Mr. CLARK. You are right, we have looked at that application. It is, we think, a tourist attraction, if you will, a gondola-to-the-top-of-the-mountain thing. We find it hard to justify under our policy of making that type of loan. But let me take another look at it, Senator. I will be happy to re-review it, if you like.

Senator McClure. If you would, I would appreciate it. I know the difficulty you have. You have an awful lot of applications; a lot of them are on the line, at best. But here is a community in which they have few alternatives, and they are looking for something which they regard as a business proposition.

But because it is thought to be either recreational or tourism, both of which by specific letter and interpretation cannot be granted, then this project is out. They do not have many choices in that community. One of the first responses I got was that recreation loans are out, and since this is going to go to a ski area, it is a skiing development program and therefore not eligible. Well, that is 3 or 4 months of the year. Most of the year they do not have any skiing up there. The majority of the people who ski the area are local, under any circumstances.

But it is not primarily to service the ski area. That happens to be on the same mountain. The primary purpose is to build a business opportunity and provide some employment in that community. And if there is some way it can be interpreted so that it qualifies, I think that it is well-justified.

The second question, which we will never get to unless we get past that first one, is whether it is feasible. We have not even looked at feasibility yet, because it is, so far, lost on the eligibility question.

If you would take another look at it, I would certainly appreciate it.

Mr. Clark. I guess a lender always looks at what is the worst that can happen when a loan goes sour. I guess it worries me that I have to climb that mountain and repossess that gondola.

Senator McClure. Well, another federal agency is going to have to climb that mountain and repossess the ski area. [Laughter.]

Thank you very much. Thank you, Mr. Chairman.

RURAL HOUSING

Senator Burdick. The fiscal year 1988 budget calls for the elimination of FmHA rural housing programs. For fiscal year 1987, it requests a rescission of most very low income grant funds and a negative supplemental of $1.52 billion in rural housing loan funds. The President's budget requests a 75-percent reduction in rural housing lending in fiscal year 1987. With severe problems in the local rural economics, does the department have any evidence that the private sector can lend to these low-income families currently served by FmHA?

Mr. Clark. There is no concrete answer to that question, and it is a good question, Mr. Chairman. However, we are convinced by the studies we have done that the issue is not the number of units out there and it is not the people who can afford those houses; it is really the shortage of income in those areas.

We think our housing voucher program that will provide for 21,200 units and will supplant the rental assistance we have now, will be filling a great deal of that need.

So it is really a redirection of our programs. Let's serve those who need the assistance the most. We will mirror the HUD programs. We think it is a viable program. I ask myself: Should there be two agencies of the government trying to do the same thing? I know we had different evaluations of Farmers Home and HUD. But I ask myself: Should there be two agencies of the government trying to serve the same master out there and provide housing, not only in the farm areas but in rural America as well?

Senator BURDICK. It is highly questionable to me whether the local banks, the local lending agencies, can lend to these low-income families. I am wondering where the other source of income is going to come from if we drop this program.

HOUSING TAX INCENTIVES

Mr. CLARK. Again, there have been some tax incentives in our rural housing project. Now these tax incentives have been altered a bit and there is less interest in them. Perhaps there should be some tax incentives for investors out there to build low-income housing and provide that financing. I would bet the commercial bankers would certainly perk up their ears if there was an incentive for them.

Senator BURDICK. In other words, the answer is: We do not know what is going to happen to these people. Is that the answer?

Mr. CLARK. We know that 21,200 units are going to be provided and are going to meet a great need. We are probably not going to serve the whole demand out there. I am not sure any program we have does that.

HOUSING PROGRAM REDUCTION

Senator BURDICK. The budget request also proposes a rescission of about $35 million for very low income grant programs including self-help, farm labor, housing preservation and home repair for the elderly. If this budget is to preserve the safety net, why does it seek to eliminate these programs serving the poorest people in rural America?

Mr. CLARK. Again, I can only answer that the units we are proposing through our housing voucher program not only give flexibility, but I think they provide an extra safety net to those people. They now are no longer confined to one particular unit that has been approved for housing. They can use that voucher throughout the community in any area that best meets their needs. I do not know if that is the whole answer, but we think that it is a viable program.

You are right, the self-help housing program has been successful in many areas but not universally throughout the nation. Labor housing is one of the most controversial programs we have in our agency. Everybody agrees that labor housing is a good idea, but do not build it in my community; build it across the county line. It has been a very controversial program for us to administer and service. I guess I would be greatly relieved to get rid of that particular burden.

RENTAL HOUSING ASSISTANCE

Senator BURDICK. The fiscal year 1988 proposal for rural housing would eliminate the existing production program in favor of the 21,200 housing vouchers that you alluded to a minute ago. The budget does not request any funds for renewal of existing rental assistance projects, and I understand that as many as 15,000 contracts will expire in fiscal year 1988.

Does that mean that most of the vouchers available will be used to continue existing contracts and there will be little new assistance available?

Mr. CLARK. That is true. There will not be renewal of those rental assistance contracts; however, we would give priority to those who need that assistance coming out of that rental assistance program with our voucher program. So we hope, if they lose the rental assistance here, they have a voucher here that takes the place of it. Priority would be given to our present occupants whom we support through rental assistance.

Senator BURDICK. Some would be left without help, too, would they not?

Mr. CLARK. I would hope not.

Senator BURDICK. If you abandon the program, there have got to be some people left without assistance, I would think.

NORTH DAKOTA ETHANOL PROJECT

The Dawn Enterprises Ethanol Project of Walhalla, ND, is trying to work with Farmers Home Administration to obtain additional financing or concessions that will enable the plant to resume operations. Dawn's request for an additional loan guarantee of $1.5 million was recently denied. Dawn is preparing an appeal. What is the status of Dawn's application, if you know?

Mr. CLARK. As I recall, that has been denied. You are correct. There is an appeal pending on that program. I am reminded that we are still continuing to negotiate with Dawn. The first application was denied and it was resubmitted. We are trying to reevaluate that application with some changes on their part. I must admit it does not look good, but if indeed it is denied again, there will be an appeal process. We will be happy to offer that to them.

ETHANOL INDUSTRY

Senator BURDICK. There is another ethanol project in North Dakota. Alchem of Grafton also has a request before FmHA. Alchem is asking that its 90 percent loan guarantee on $8.4 million be made permanent. Alchem was notified that its loan guarantee on $8.4 million cannot be made final because the project, in FmHA's judgment, has insufficient "tangible book equity."

Alchem has not been able to obtain a definition of "tangible book equity." I am concerned that FmHA will be using this ambiguous term as a cover for denying loan guarantees to ethanol projects. What is

FmHA's definition of "tangible book equity?" Also, what is FmHA's view of the state of the ethanol industry?

Mr. CLARK. We continue to work with that organization to see if it can be salvaged. Overall studies do not paint a very bright picture for the ethanol industry. The economists, I think, are taking another look at it as well. But we are trying to get some factual projections for that industry.

What is the outlook for ethanol? Will the long term be beneficial to not only those we are financing but the whole industry as well? So it is not a dead issue. We are still taking a look at it.

Back to your original question of "tangible." I do not have a dictionary in front of me, but, as a banker, "tangible" means you can convert it into cash some way. Is there a value in a secondary market or wherever to turn that collateral into cash as a recovery to the government. I hope that is not an ambiguous term. I assure you that we are not purposely doing anything that would confuse or cloud that issue.

RURAL WATER CIRCUIT RIDER PROGRAM

Senator BURDICK. How much do you recommend for carrying out the circuit rider program for rural water systems? Again, you propose to eliminate the specific language which deals with this program. The justification that you cite for this elimination is that the change would allow the agency necessary flexibility to bargain with various contractors.

Is there any prohibition at this point from bargaining with various contractors for the circuit rider program?

Mr. CLARK. We have earmarked in our budget $2.3 million for the continuation of the circuit rider program. We need that service, and we think it is a very viable and valuable service, not only to our borrowers but to that whole industry as well.

I think we are just asking that it not be specifically identified for the organization that has been doing it for us. We want some flexibility as to who gets that circuit rider contract.

Senator BURDICK. The program would be intact, then.

Mr. CLARK. It would be intact, ongoing.

SUBMITTED QUESTIONS

Senator BURDICK. I thank you for your testimony this morning, all of you. I have some additional questions to be submitted from the following Senators: Burdick, Sasser, Bumpers, McClure, Grassley and Domenici. I trust that you will respond in an expeditious manner for the record.

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR BURDICK

NEW REGULATIONS

I am concerned about the proposed regulations now under consideration. FmHA seems to be trying to find new ways to deny loan applications and to phase out direct loan programs. Instead of helping beginning farmers, FmHA is making it harder for them to qualify for loans. Instead of simplifying procedures and reducing paperwork, FmHA is making the process even more complicated and adding to the red tape that borrowers must untangle.

FmHA was intended to be a lender of last resort for family farmers who could not obtain conventional credit but the Agency seems to be drifting away from this purpose and appears to be preoccupied with discouraging new borrowers. If borrowers could meet the requirements in these regulations, they would not need FmHA's help.

Instead of thinking of ways to make life harder for FmHA borrowers, you should be working with them to help them keep their farms.

PRE-APPLICATION REVIEW

Question: The proposed regulations would require a pre-application review of all FmHA loan applicants. Why are you imposing this additional hurdle for borrowers?

Answer: The purpose of the pre-application process is to: (1) identify early in the application process applicants with a high degree of potential loan failure; (2) identify loan applicants who may qualify for private credit; (3) expedite the application process for applicants with a reasonable chance of success; and (4) save the Government both time and money.

We are exempting existing FmHA borrowers from the pre-application process. Based on the application processing records for fiscal year 1986, we estimate that 124,368 hours could have been saved by not having to completely process 18,702 applications. The time saved could be spent on carrying out our responsibilities of providing supervision to borrowers having a reasonable prospect of success.

Question: What rights do applicants have to appeal a denial under this procedure?

Answer: Applicants have the right to appeal an adverse action at the pre-application stage under FmHA's administrative appeal process. The appeal would address the accuracy and validity of the information used to calculate the ratios.

RISK RATIOS

Question: FmHA also proposes to use so-called risk ratios as a standard by which to deny or approve loan applications. Have you tried to measure how many applicants, particulary existing borrowers, would be denied loans because they could not meet these ratios?

Answer: Based on recent GAO studies and FmHA data, we estimate that some 20 percent of FmHA borrowers are technically insolvent, and we would expect them to be excluded. The same GAO report shows that about 17 percent of those FmHA borrowers included in the study were in relatively good financial shape and should be eligible for guaranteed loans.

In the case of first time applicants for FmHA credit, we have projected that approximately 30 percent would be extremely high risk and have no reasonable chance of repaying their requested loans. In addition, we believe about 20 percent of first time applicants can get credit elsewhere due to their low risk.

Question: Will consideration be given to any other factors--such as a borrower's credit history, his farm plan, his financial management, the availability of credit in the area--before denying an application?

Answer: In the pre-application stage, none of these factors would be considered, although in some respects, an applicant's financial management will be reflected in the ratio scoring. However, those applicants who are denied loan assistance in the pre-application stage because they may be able to secure other credit, may be further considered if they can provide documentation from other lenders that credit is not available. Factors such as credit history, farm plan and management ability must still be certified to by the FmHA County Committee prior to the final certification of eligibility for FmHA assistance.

MAINTENANCE AND DEPRECIATION RESERVES

Question: FmHA proposes to require reserves for taxes, repairs and depreciation in evaluating cash flow. How will the amounts for these required reserves be calculated?

Answer: Due to the concerns raised regarding the establishment of a reserve for taxes, repairs and depreciation we will modify this requirement to where we will not require a reserve for specific items but will require a modest reserve to allow for uncertainties associated with the farming operation.

SECURITY REQUIREMENTS

Question: FmHA proposes to require liens on all of a borrower's assets, not just on assets sufficient to assure repayment of the loan. Isn't this requirement extreme?

Answer: This requirement will be deleted from our final rule.

COMMODITIES "IN SURPLUS"

Question: FmHA proposes to extend the "surplus" crop rule to guaranteed loans, as well as direct loans. Isn't this contrary to the purpose of FmHA?

Answer: Government credit, including direct loans, should not encourage or contribute to the overproduction of commodities that are considered to be in surplus.

However, due to the considerable objection to our proposal for guarantee loans, we will remove the surplus crop rule from our proposed regulations and also from our existing regulations for insured loans.

Question: Won't this requirement make it more difficult for FmHA borrowers to repay their loans?

Answer: We expected the surplus crop rule would have proven beneficial, in the long run, to loan repayment in that borrowers would not be relying on the uncertain flow of income including government payments on commodities in surplus.

Question: This rule will state that farmers who raise a surplus crop cannot qualify for assistance. What is a surplus crop?

Answer: A surplus crop pertains to selected agricultural commodities such as crops, livestock, or livestock products on which the United States Department of Agriculture is taking action to reduce production for the selected agriculture commodity by either a price support program or some other subsidy program.

SALES OF ACQUIRED FARMLAND

Question: The regulations would permit FmHA to auction farmland to the highest bidder within one year of acquiring the land through foreclosure. The historic mission of FmHA has been to help foster family farms. Had not FmHA previously restricted sales of its acquired farmland to family-size farms for at least three years after acquisition?

Answer: The law restricts FmHA from holding suitable properties for eligible buyers for longer than three years from the date of acquisition by FmHA. However, it does not require suitable properties be retained for three years by FmHA for sale only to eligible buyers. Properties taken into inventory which are not suitable as family-farm units may be classified as surplus immediately and placed on the market for sale to ineligible farm ownership loan applicants.

Question: Why has FmHA chosen to abandon this policy?

Answer: In view of the unfavorable comments received, we are reconsidering our proposal and expect to continue with our existing regulations without change.

EXPERIENCE REQUIREMENTS

Question: FmHA proposes that applicants, to be eligible for loans, must have experience operating and managing a farm in three of the last five years. It also would require preferences for existing borrowers, and would prohibit loans to applicants who previously entered into debt settlement with FmHA.

These rule changes will make it more difficult, if not impossible, for beginning farmers to obtain credit. They also will prevent former borrowers from starting over, even if they have overcome their past problems and improved their management skills. It appears to many of us that the real purpose of these rule changes is to phase out FmHA loan programs by limiting its services to existing customers only. Is that the purpose?

Answer: No, that is definitely not the purpose of the proposed regulation changes. There are a number of reasons why the Agency has proposed these changes. Let me name a few.

First, our experience with many of the unsuccessful borrowers shows that lack of experience and/or training almost always results in failure. It is only logical when you prepare a loan in 6 figures, that the applicant have the basic training and experience which warrants a reasonable chance of success.

Second, preference for existing borrowers who are making progress is necessary to protect our initial investment in these family farms. We think this makes good sense.

And third, we will consider applications from former borrowers who have failed and for whom we have written off losses, provided such losses were due to conditions beyond the borrower's control, such as, weather, prices, illness, etc.

Question: Do you consider a young man who grew up on a farm to have had experience operating and managing a farm?

Answer: Yes. The proposed rule which would have required three years' training or experience on operating and managing a farm will not impede beginning farmers. Those applicants who have received agricultural training in 3 of the 5 years preceding the year of application would be eligible. The training could be in the form of Future Farmers of America, 4-H clubs, agricultural college experience or as hired labor on a farm. As you know, the county committee makes the final determination as to what constitutes adequate experience and if the experience justifies making the applicant eligible for assistance. It was the intent and purpose of our proposed regulations on the matter to provide some guidelines to county committees and to achieve consistency between various State and County jurisdictions.

Question: How about if that young man just got out of college with an agricultural degree. He won't qualify, will he?

Answer: A young man or woman just out of college with a degree in Agriculture should have no problem meeting the knowledge and experience requirement for a farm loan.

CASH RENT

Question: FmHA proposes to prohibit loans for cash rent. Isn't this impractical?

Answer: On the contrary, the Agency's proposal to limit loans for cash rent will minimize FmHA's contribution to practices such as farmers bidding against each other, thereby driving up land rents and making a profitable operation virtually impossible.

Question: Won't this requirement just become another means for denying loan applications?

Answer: We believe the proposal to limit loan funds to pay cash rent would help to keep rental rates at reasonable prices; reduce amount of loan funds needed for operating expenses, share the risk, and also reduce the amount of interest a farmer pays.

However, we plan to modify our proposal to allow loans for up to 50 percent of the total rental cash for cropping operations. The tenant will be able to borrow this 50 percent and apply it up front with the remaining 50 percent being released from crop proceeds. In those cases where it is customary for the area or the lease requires 100 percent cash rent up front FmHA will continue to provide funds as long as a feasible farm plan can be developed.

APPEAL RIGHTS AND FORM LETTERS

Question: FmHA needs to clarify its form letters. Borrowers say the letters are confusing. The deadlines for appeals, or action, are not clear. Borrowers are not given a clear explanation of their rights. Also, borrowers should be allowed to request a combination of servicing options and liquidation actions. Presently, the forms make these seem mutually exclusive. What steps is FmHA taking to make its letters more understandable?

Answer: We are aware that the form letters, particularly Form FmHA 1924-26, "Borrower Acknowledgment of Notice of Intent to Take Adverse Action", may have caused some confusion with certain borrowers. We are taking corrective action to eliminate the confusion. The revisions to the forms will advise borrowers of additional servicing options, as provided in the Food Security Act of 1985, i.e., provide a clearer understanding of appellants' rights and options, and establish specific deadlines for requesting a conference or hearing. Those revisions are being made based on comments we have received from the general public, and in accordance with recent court decisions and recommendations for the Office of the General Counsel.

Question: When do you propose these regulations to go into effect?

Answer: We are currently revising Form FmHA 1924-26 which should clarify the options available to the borrower and would hope to have it out within the next few months.

CREDIT AVAILABILITY

Question: I am very concerned about the availability of credit for our farmers this Spring and in fiscal year 1988. You state in your testimony that you have been successful this year in your continuing move toward guaranteed credit. Well, frankly, I just don't buy that. The figures that I have from your own administration indicate that your operating loans, both direct and guaranteed, are down this year as compared to last year by 18 percent, and the loan value is off over $200,000,000.

If you would, I would like to draw your attention to North Dakota, as an example, where there is definitely a shortfall of credit. The allocation for direct operating loans for the first two quarters for North Dakota was just over $47,000,000. North Dakota ran out of that money on February 18, just a month-and-one-half after it had been made available.

What has North Dakota been doing since February 18 with regard to operating loan applications?

Answer: North Dakota FmHA officials are making guaranteed loans by utilizing Operation Assist. Operation Assist is where FmHA introduces an applicant with a completed guaranteed loan package to a lender for consideration.

Since February 20, $3.6 million in guaranteed operating loans have been made in North Dakota.

Question: This is the most important time of the year in terms of farmers getting their operating capital together. Have those loans been put on hold and how soon will further allocations be made?

Answer: For those States which have exhausted their second quarter direct operating loan funds, we will provide funding, if the applicant is unable to obtain a guaranteed loan. Operation Assist will be fully utilized.

Question: I understand that North Dakota requested that its third and fourth quarter allocations be released. This request was made on February 13. What has happened with that request?

Answer: We have asked them to reconsider their request and have asked that they make every effort to fund these loan applications with guaranteed funds by the use of Operation Assist.

Question: Will it be granted?

Answer: If it is found that the guaranteed loan authorities under operation assist cannot meet the needs, we will see that adequate direct loan program funds are made available.

Question: The problem is that the third and fourth quarter allocation combined is roughly only $16,000,000, half the amount of the second-quarter allocation. What are you going to do to guarantee that there is enough credit for those farmers who are eligible out there?

Answer: The FmHA operating loan lending season peaks about mid-March of each year. From that point until the end of the fiscal year the need for operating funds steadily declines.

The use of the guaranteed operating loan program is increasing every year. For example $1.1 billion in guarantees were issued in fiscal year 1985 and $1.4 billion in fiscal year 1986. To date in fiscal year 1987, loan guarantees are currently ahead of fiscal year 1986 by 31 percent. Many rural banks are now reporting their loan deposit ratio is at its lowest since the mid-1960 and they are actively seeking new farm accounts. In order to utilize this source of funding, FmHA is making an all out effort to inform banks of the guaranteed loan program and help them prepare guaranteed loan requests by use of operation assist. By assisting applicants and lenders in preparing guaranteed loan packages, we expect to increase participation in the guaranteed loan and interest buydown programs. FmHA believes banks will respond to the guarantee program as they become more and more familiar with the options available to them, and the reduced risk that the guarantee provides.

In addition, more counties in the country are designated in fiscal year 1987 for emergency loans then in fiscal year 1986, and the $400 million in ASCS disaster payments have been made to farmers. Based on the normal peaking of the operating credit needs, the increased use of the guaranteed operating loan program, the availability of FmHA emergency loans and ASCS disaster payments, we do not anticipate a shortfall of operating credit for fiscal year 1987.

Question: In the case of the farm ownership loans, North Dakota's allocation was 1.6 million, or roughly enough for one loan for every two counties. This money was used up the day that it was received by the State. How can you tell the Committee that they have enough credit available?

Answer: Increased use of the guarantee loan authority will benefit borrowers, lenders and FmHA by expanding the availability of private credit, as well as supplementing the servicing and loanmaking capabilities of FmHA. FmHA will subordinate and participate with other lenders to stretch the available direct farm ownership funds. Use of the guarantee authorities, as authorized in the Food Security Act of 1985, has increased over previous years, adding to the available credit for farmers from the private sector. In addition, FmHA will utilize its inventory farm properties as a means of establishing eligible beginning farmers in lieu of using insured farm ownership funds. We support the complete phase out of direct and guaranteed loans for farm ownership so that more emphasis may be placed on loans for farm operating purposes.

ACQUIRED PROPERTY SALES

Question: North Dakota's guaranteed loan funds do still have some money that can be made available to farmers. Rather than showing that there is ample credit available, this situation merely shows that the guaranteed loan funds are not working. The banks are not participating in them like they should, the banks are requiring too large of a downpayment; it simply is not a viable option for credit for our farmers. I really think that you need to take another look at your priorities in this matter, and to make a different request for credit for our farmers.

Both FmHA and the Farm Credit System are attempting to sell some of their acquired property. Farmers would be interested, but they can't get any ownership credit to buy. To whom do you expect to sell this land?

Answer: A recent limited survey of sales of farm from FmHA inventory during fiscal year 1986 and the first three months of fiscal year 1987 indicated that: 47.5 percent of the sales were to existing farmers; 17.1 percent of the sales were to new or beginning farmers; and 35.4 percent of the sales were to nonfarmers. We would expect this trend to continue.

CREDIT AVAILABILITY FOR FISCAL YEAR 1988

Question: Not only do I foresee real credit problems for fiscal year 1987, but I believe the budget you proposed has significant problems for fiscal year 1988.

First of all, you continue to push for your shift from direct loans to guaranteed loans. We already are seeing from experience that this shift is not working. While the direct loan fund run out immediately, the guaranteed loan funds remain available because the banks and the lenders that are supposed to get the guarantees do not participate in the program.

Now, for next year, the Secretary is proposing not to make any advance deficiency payments available to farmers. By your own calculation,, the total amount of advance deficiency payments which would be made in fiscal year 1988, if the same pattern were followed, that was used in fiscal year 1987, that total amount would be $4.9 billion. If the Secretary sticks with this proposal, and Congress does not change it, that means these farmers are going to be out that much money which they normally would use to help put their crops in and run their farms. A $4.9 billion shortfall in this area is going to create an intense demand on the Farmers Home Administration credit programs. Do you agree with this assessment?

Answer: FmHA has taken steps to increase participation in the guaranteed loan program by private lenders. Some of the actions taken includes faster processing of applications, guaranteeing operating lines of credit, and having increased guaranteed available funds. FmHA has provided training meetings for private lenders to insure that they fully understand FmHA's guaranteed loan program. During fiscal year 1987, more guaranteed operating loans have been obligated than the comparable period in fiscal year 1986. As of March 10, 1987, obligated guaranteed operating loans had increased from 2,519 in fiscal year 1986, to 3,676 in fiscal year 1987, a 31 percent increase. In terms of funds, $374,215,000 had been obligated in fiscal year 1987, whereas only $285,174,000 was obligated in fiscal year 1986, a 24 percent increase. This is a positive indication of greater acceptance and more active participation on the part of the private sector to utilize the guaranteed loan programs.

Question: What do you propose to try and do to offset the unavailability of cash from the advance deficiency payments?

Answer: We expect adequate credit to be available. FmHA will subordinate and participate with other lenders and suppliers to assure adequate financial assistance. Increased guaranteed loan authorities along with the liquidity of agricultural backers indicate an ample source of credit for agricultural producers.

ETHANOL PLANTS

Question: The Dawn Enterprises Ethanol Project of Walhalla, North Dakota, is trying to work with Famers Home Administration to obtain additional financing or concessions that will enable the plant to resume operations. Dawn's request for an additional loan guarantee on $1.5 million was recently denied. Dawn is preparing an appeal. What is the status of Dawn's application?

Answer: The Dawn Enterprises Ethanol Project has a $20 million loan that is 90 percent guaranteed. The plant is presently closed and is scheduled to begin operations again in April 1987. The loan is past due on interest payments and monthly principal payments are scheduled to start in March 1987. The borrower submitted a workout plan in January 1987 that was declined by FmHA because the borrower requested an additional loan guarantee which would create a larger debt structure.

Question: Another ethanol project in North Dakota, Alchem of Grafton, also has a request before FmHA. Alchem is asking that its 90 percent loan guarantee on $8.4 million be made permanent. Alchem was notified that its loan guarantee on $8.4 million cannot be made final because the project, in FmHA's judgement, has insufficient "tangible book equity." Alchem has not been able to obtain a definition of "tangible book quity." I am concerned that FmHA may be using this ambiguous term as a cover for denying loan guarantees to ethanol projects. What is FmHA's definition of "tangible book equity."

Answer: Tangible book equity is the appraised value of a firm recorded by a CPA on an audited financial statement as equity in accordance with generally accepted accounting principles. Alchem, Ltd. submitted an audited financial statement dated December 31, 1986, in which the equity of the company was stated to be $904,820 or 8.9 percent of total assets. FmHA regulations require a balance sheet equity in the amount of at least 20 to 25 percent at time of closing of an alcohol project loan guarantee. The conditional commitment to Alchem, Ltd., required 25 percent tangible book equity.

Question: What is FmHA's view of the State of the ethanol industry?

Answer: FmHA experience has not been good in financing ethanol plants. FmHA has issued loan note guarantees on 12 ethanol plants. Seven of these plants have gone out of business. One paid the loan off and went out of business. The other four have had financial problems and FmHA has had to make concessions to three of these firms to keep them operating. Unless the price for ethanol improves significantly, ethanol facilities will not have the cash flow to continue to operate.

Question: Is FmHA, out of concern over the economic future of ethanol, reluctant to lend more money to ethanol projects?

Answer: Until it is proven that ethanol plants are viable projects which can operate and meet the obligations of the note and mortgage, FmHA will be reluctant to lend more money to ethanol plants.

CIRCUIT RIDER PROGRAM

Question: How much do you recommend for carrying out the Circuit Rider Program for rural water systems?

Answer: FmHA entered into a competitive contract with the National Rural Water Association (NRWA) to provide technical assistance to rural water systems for fiscal year 1986 with an option to continue through fiscal year 1987. For fiscal year 1987, $2,047,000 million was available for the circuit rider program. The fiscal year 1987 funding has allowed circuit rider assistance to be available in 35 States. We have prepared a request for proposals for a possible fiscal year 1988 contract at a similar level to fiscal year 1987 pending the availability of funds.

Question: You propose to eliminate the specific language which deals with this program. The justification that you cite for this elimination is that the change would allow the Agency necessary flexibility to bargain with various contractors. Is there any prohibition at this point from bargaining with various contractors for the circuit rider program?

Answer: No, there is flexibility to contract with various contractors. The Agency follows the Federal Acquisitions Regulations in contracting for the circuit rider program.

Question: If not, why do you continue to ask that the language be stricken?

Answer: If a particular contractor or a specific dollar amount is shown in appropriations legislation for contracted services, some potential contractors may not submit proposals. Also, the submissions received may not reflect the most cost-beneficial price proposals. These factors could limit competition and FmHA's ability to negotiate the best possible contract.

Question: You told the Committee last year that the Circuit Rider program has been very successful and that it is a good program and money well spent. Do you still agree with that assessment?

Answer: Yes, we have been pleased with the circuit riders' performance. The circuit rider assistance tends to supplement FmHA's responsibility for providing technical assistance to rural water systems. Assistance in areas such as leak detection and correction, chlorination, water meters, water rates, management and maintenance plans all tend to improve rural water systems and help to improve or maintain FmHA's security position on FmHA-financed water systems.

GENERAL

Question: The fiscal year 1988 Budget calls for the elimination of FmHA rural housing programs; for fiscal year 1987 it requests a rescission of most very low-income grant funds, at a negative supplemental of $1.52 billion in rural housing loan funds.

The President's Budget requests a 75 percent reduction in rural housing lending in fiscal year 1987. With severe problems in the local rural economies, does the Department have any evidence that the private sector can lend to those low-income families currently served by FmHA?

Answer: No, we do not have any evidence that the private sector can replace our assistance to very low-income families. However, we propose a change in direction and emphasis in our housing assistance to rural areas. We know that there are persons with housing problems in rural areas; we also know that even with the assistance we currently provide we are not reaching them all. Our intention is to use a rural housing voucher program to provide assistance to very low-income families and to continue assistance to those very low-and low-income persons and families currently assisted.

Question: The budget request also proposes a rescission of about $35 million very low-income grant programs including self-help, farm labor, housing preservation and home repair for the elderly. If this budget is to preserve the "safety net," why does it seek to eliminate those programs serving the poorest people in rural America.

Answer: We are proposing to eliminate a very diverse and complex set of programs that call for substantial, long-term budgetary commitments, in some instances as long as fifty years and over $3 billion a year. We will replace those programs with a direct and simple voucher program with a five-year definable financial commitment that will be directed to very-low income rural families.

Question: The fiscal year 1988 proposal for rural housing would eliminate the existing production program in favor of 21,200 housing vouchers. The budget does not request any funds for renewal of existing rental assistance projects, and I understand that as many as 15,000 contracts will expire in fiscal year 1988. Doesn't this mean that most of the vouchers available will be used to continue existing contracts and little new assistance will become available?

Answer: We consider it important both to continue assistance to those families now assisted who have a continuing need, and to assist those not currently assisted who are in need. In fiscal year 1988, we project that 12,000 families currently receiving rental assistance may need to be renewed and, after setting aside 1,200 vouchers for families from prepaying projects, up to 8,000 new units of assistance can be made available to very low-income families.

Question: The fiscal year 1988 proposal changes the emphasis of our rural housing effort from production to subsidizing existing units. There are still over two million rural families living in substandard housing. There is also a serious shortage of adequate rental housing in rural areas. How does the Department justify this shift in emphasis?

Answer: We believe that our focus must be on those families needing assistance. To the degree possible, we want to go directly to the individual rural families with assistance, not though developers or other entities. We feel this is one important way to control long-term spending for housing assistance and to reduce federal lending and subsidies.

Question: Since 1981, the FmHA water/waste water program has been reduced by about 50 percent. The budget request calls for a $79 million rescission in fiscal year 1987 and no funding in fiscal year 1988. What evidence do you have that the need for this program has declined?

Answer: The proposed fiscal year 1988 budget reflects the intent of the Administration to limit the size and scope of Government programs and their impact on the Federal deficit. Rural communities will rely on the private sector, grants administered by the Environmental Protection Agency, other Federal Agencies, and State funding.

ACQUIRED PROPERTY

Question: Mr. Clark, you indicate that you are now asking your State Directors to begin selling property that they have in inventory. You also state that you have some 5,000 farm properties on your hands. I commend you for your statements that you will offer, without exception, the former owner or operator the first right to lease the farm back. I assume that they will also be given the first right to repurchase the farm, is that correct?

Answer: The prior owner-operators of farms taken into inventory will be given the first opportunity to lease-back or buy-back their farms. If they choose to lease-back their farms, leases can be approved either with or without an option to purchase.

Question: I also commend you for insisting that your selling of the property does not contribute to futher declining local property values. You stated that, hopefully, the slide in farmland values has ended. Do you have any evidence to support this hope?

Answer: Yes, reports from our State Directors indicate that recent FmHA inventory farm sales are not adversely affecting real estate values. These reports were based on data from local realtors, bankers, and other agricultural lenders.

Question: Could you please provide for the Committee an updated report on acquired property? Could you also include in that report for the farm properties, their location by state, as well as the total number of acres for each state and an average number of acres per parcel?

Answer: A state-by-state listing of FmHA farm inventory properties and their estimated acreage for the period ending January 31, 1987 follows. We have no estimates as to the number of acres per parcel.

[The information follows:]

Farm Properties in Inventory as of January 31, 1987

State	Number of Farms	Number of Acres	Present Market Value ($000)
Alabama	26	4,068	$2,417
Alaska	0	0	0
Arizona	13	10,498	7,023
Arkansas	124	27,634	17,625
California	115	39,849	61,691

Colorado	123	59,194	26,028
Connecticut	0	0	0
Delaware	2	11	184
Florida	89	17,652	12,901
Georgia	149	38,651	20,603
Hawaii	0	0	0
Idaho	140	41,647	25,677
Illinois	144	22,973	18,589
Indiana	133	19,866	16,498
Iowa	316	66,673	43,549
Kansas	316	84,891	42,798
Kentucky	70	10,673	5,832
Louisiana	107	29,190	31,146
Maine	50	9,958	3,868
Maryland	7	771	1,341
Massachusetts	3	488	1,882
Michigan	169	29,621	25,843
Minnesota	178	48,991	30,791
Mississippi	234	61,575	39,654
Missouri	711	168,271	93,574
Montana	28	30,419	7,218
Nebraska	117	46,001	17,200
Nevada	11	19,133	3,854
New Hampshire	0	0	0
New Jersey	4	255	507
New Mexico	44	99,497	11,489
New York	153	33,540	17,365
North Carolina	175	26,225	27,354
North Dakota	138	79,874	26,116
Ohio	57	8,390	7,211
Oklahoma	177	68,578	32,592
Oregon	68	20,445	16,355
Pacific Terr.	0	0	0
Pennsylvania	53	6,753	6,923
Puerto Rico	17	1,566	2,155
Rhode Island	1	66	500
South Carolina	41	7,293	4,393
South Dakota	216	118,306	26,487
Tennessee	255	37,887	41,078
Texas	57	34,170	14,534
Utah	5	1,037	372
Vermont	6	1,526	892
Virgin Islands	1	110	10
Virginia	22	2,042	2,009
Washington	60	18,200	14,509
West Virginia	15	1,799	1,714
Wisconsin	204	43,761	29,443
Wyoming	24	24,852	5,686
U.S. TOTAL	5,168	1,524,870	$847,980

Question: Have you had any success so far with selling some of this property?

Answer: Yes, we have. During the first four months of the fiscal year, we have sold 282 inventory properties. Of this total 145 were sold for cash, 61 on eligible terms and 76 on ineligible terms. This compares favorably with our sales for fiscal year 1986, when we sold a total of 829 farms; 274 for cash, 271 to eligible applicants and 284 to ineligible applicants.

Question: Recently, I understand, that the General Accounting Office (GAO) examined the acquired property portfolio of FmHA. The GAO recommended that you issue a policy stating that when suitable property is not sold within a specified time, it should be reclassified as surplus property. Have you issued a policy directive?

Answer: Our interpretation of 7 U.S.C. 1985, the current law governing disposition of surplus property, is that if property initially classified as suitable is not sold within 3 years, it must be reclassified as surplus. We do not interpret this to mean that suitable property must be held for 3 years before being declared surplus. We have not issued a policy statement on this, but we have proposed regulations. Due to the concerns raised regarding this proposed regulation, we will continue with our present regulations which allows for property to be held for 3 years before declaring it surplus.

Question: What would be a suitable period of time?

Answer: We believe that one year is sufficient time to seek out eligible buyers for inventory property. There are enormous costs associated with the maintenance of an inventory property and the longer we are required to hold it for sale as suitable property, the greater these costs will be.

Question: What is the effect of having such property classified as surplus property?

Answer: Having the authority to reclassify inventory property from "suitable" to "surplus" after holding the property in inventory for one year would reduce inventory and maintenance costs to the government, prevent waste and deterioration of the property, and encourage sales for use of the land for which it is best suited.

DEBT ADJUSTMENT

Question: North Dakota farmers are telling me that FmHA will not restructure debts. I am informed by people who have studied this problem, that there has not been one case in North Dakota in which FmHA has adjusted debt without liquidating the borrower first. This situation is intolerable.

What changes in law or regulations are needed to allow FmHA to carry out a program of debt restructuring and adjustment, interest rate reduction, and payment deferral without interest?

Answer: We do provide servicing options which will allow the borrower to reschedule, reamortize, and consolidate at regular or limited resource interest rates if these actions will result in a feasible plan of operation for the farmer. However, we do not have a program that will allow the Agency to "write down" a borrower's debt and continue with the borrower. The Agency is currently considering a one time write-down of a borrower's debt to the market value of the security and continue with the account, when it is in the best interest of the Government. The debt written down would be set-aside in a noninterest bearing note that would be due when the indebtedness matures or when the property is sold and recovery is greater than the market value at the time of the write down.

Question: Will FmHA institute such a debt adjustment program without being mandated to do so by Congress?

Answer: Yes, as I previously stated, we are presently considering a write-down/set-aside program.

DELINQUENT BORROWERS

Question: How many farmers has the Farmers Home Administration foreclosed in fiscal year 1986, and how does this compare to the current foreclosure rate for fiscal year 1987?

Answer: In fiscal year 1986 the Farmers Home Administration foreclosed on 111 farm borrowers. During this same period of time, prior and junior lienholders foreclosed on 850 FmHA borrowers.

Through January 31, of fiscal year 1987, the Farmers Home Administration has foreclosed on 85 farm borrowers. Prior and junior lienholders have foreclosed on 183 FmHA borrowers.

Question: What is your anticipation for fiscal year 1988 in this area?

Answer: It is very difficult to predict the number of foreclosures for fiscal year 1988 because we are unable to calculate the number of borrowers whom the Agency will be able to continue with through servicing options, i.e., rescheduling, reamortization, consolidation, deferral and limited resource interest rates. This will also depend in large part on how well each individual borrower fares, production and price wise, in 1987.

Question: For the same periods, how many transfers of land were made from farmers to the Farmers Home Administration?

Answer: During fiscal year 1986, 912 borrowers voluntarily conveyed their farms to the Farmers Home Administration. Through January 31, 1987, 364 borrowers have voluntarily conveyed their farms to the Farmers Home Administration.

Question: What types of transfers were these?

Answer: These were all voluntary conveyances of real estate.

Question: Please, for the foreclosures and transfers, provide the amount of land, the number of parcels, and the state in which these transactions occurred.

Answer: The number of FmHA farm foreclosures and voluntary conveyances by state for fiscal year 1986 and through January 31, 1987 are listed below. The number of acres and/or parcels associated with such transfers is not available.

FmHA Farm Foreclosures and Voluntary Conveyances

	FY 1986		FY 1987 (thru 1/31/87)	
State	FmHA Foreclosures	Voluntary Conveyances	FmHA Foreclosures	Voluntary Conveyances
Alaska	3	4	9	11
Alabama	0	0	0	0
Arizona	0	7	0	5
Arkanas	5	105	1	28
California	2	6	3	2
Colorado	1	5	4	9
Connecticut	1	0	0	0
Delaware	0	0	1	0
Florida	1	3	0	3
Georgia	3	54	2	19
Hawaii	0	0	0	0
Idaho	3	21	3	6
Illinois	0	24	0	5
Indiana	1	27	0	3
Iowa	1	30	0	19
Kansas	2	43	0	2
Kentucky	1	32	1	9
Louisiana	1	26	7	4
Maine	0	12	0	2
Maryland	3	1	2	1
Massachusetts	0	0	2	0
Michigan	2	15	2	13
Minnesota	1	33	0	11
Mississippi	2	53	3	31
Missouri	30	86	8	39
Montana	0	17	0	6
Nebraska	6	14	1	4
Nevada	0	1	0	0
New Hampshire	0	0	0	0
New Jersey	0	6	0	0
New Mexico	2	8	0	5
New York	0	7	0	2
North Carolina	6	23	5	4
North Dakota	1	26	1	37
Ohio	0	5	2	1
Oklahoma	2	16	2	3
Oregon	4	8	3	3
West Pacific Territory	0	0	0	0
Pennsylvania	2	11	1	4
Puerto Rico	1	1	0	0
Rhode Island	0	0	0	0
South Carolina	0	1	0	1
South Dakota	2	29	0	20
Tennessee	12	65	2	25
Texas	5	51	16	10
Utah	0	0	2	0
Vermont	0	1	0	1
Virgin Islands	0	0	0	0
Virginia	1	4	0	0
Washington	0	10	0	6

West Virginia	1	7	0	2
Wisconsin	3	6	1	8
Wyoming	0	8	1	0
U.S. Total	111	912	85	364

RURAL HOUSING INSURANCE FUND

Question: The budget justification claims that the very low-income housing repair loan program has not been fully utilized in the past. Thus, it is proposed for termination.

These loans are provided to permit very-low income persons to repair or improve their dwellings in order to remove health hazards and make their homes safe and sanitary. In fiscal year 1987, $2.8 million was appropriated. What is the estimate for fiscal year 1987 of how many 504 loans will be made?

Answer: The very low-income housing repair loan program level of $2.8 million in fiscal year 1987 would provide for upwards of 900 loans.

Question: If the housing voucher program were substituted for the current rural housing program, would specific funds be earmarked to assure that very low-income persons had funds available for the repair and improvement of their dwellings?

Answer: As we are proposing the housing voucher program, funds would not be earmarked for this purpose as the voucher program provides rental subsidies, not repair and improvement assistance.

SECTION 502 - GENERAL PURPOSE LOANS

Question: When very low-income and low-income rural residents cannot obtain credit elsewhere to pay equity or make repairs to single-family dwellings, subsidized and non-subsidized housing loans have been available under Section 502.

In fiscal year 1986, general purpose loans were made available for over 25,000 units at a cost of $1.1 billion to the Federal Government. It is estimated that in fiscal year 1987, $334,800,000 will serve as credit for over 7,000 units. If a housing voucher program is implemented, what is the advantage to very low-income and low-income rural residents?

Answer: I think this hits at the crux of the issue with respect to housing vouchers. There are advantages for the rural families assisted, as well as advantages to FmHA and to this Nation's budget and deficit problems. Let me take a few moments to address each of these in turn.

Very low-income families would have the advantage of choosing where they want to live and having some flexibility of moving with or to a job without forefeiting their housing subsidy, if it is still needed, rather than being tied to a specific housing unit. Families would be able, with the help of local public housing agencies, to negotiate with private landlords and pay even less than 30 percent of their income for housing in some instances, or more, if they wished to upgrade their housing amenities. We do know that there are rental units available in rural areas. An analysis prepared for us by the Economic Reasearch Service and based on the 1980 U.S. Census indicates that there were over 640,000 yearround units available for rent. There is little reason to believe that there are fewer today. In addition, there are vacant units in projects financed by FmHA in some rural communities that could also be used as a housing stock base for the voucher program.

The advantages to FmHA are several as well. We are currently administering a complex set of programs, ranging from loans for rental units, homeownership and sites, to grants for self-help, home repairs and housing rehabilitation. Having such diversity is administratively expensive and inefficient. In this period of Government austerity, we need to refocus on the priorities of the use of staff and money. For housing, rental vouchers present the advantage of both targeting our staff and money to assist those most in need and simplifying our overall housing mission.

In the context of the overall priorities of this Administration, vouchers represent both cost savings and better long-term financial control of the Federal Budget. I do not need to tell this Committee of the deficit facing us and the need to gain control over it. Nor do I need to remind you that the housing loan programs FmHA has been administering represent both long-term financial commitments as well as subsidies out as far as the year 2038. Vouchers may well be funded and renewed for that period of time, but we are talking about five-year commitments, not fifty, and we are specifically dealing with a finite, up-front subsidy, not a backdoor subsidy which would require large reimbursements to the insurance fund in future years.

Question: Will repair and maintenance of single family dwellings be a priority of a voucher program, or will these rural residents have no recourse but to live without upgrading their homes?

Answer: The voucher program is a direct subsidy to needy families to be used to rent adequate housing. This will give program recipients living in substandard housing the opportunity to obtain adequate housing rather than perpetuate their occupancy of substandard units.

Question: How would the voucher program make home repair loans more efficient for rural residents?

Answer: They would not, nor are they intended to do so. As discussed earlier, we are refocusing our efforts to allow low-income families to obtain adequate rental units of their choice.

SECTION 514-DOMESTIC FARM LABOR HOUSING LOANS

Question: As one of two Federal programs designed to aid in assuring modest, safe and sanitary housing facilities for our domestic farm laborers, Section 514 provided low-interest loans for over 650 facilities in fiscal year 1986 with $10.7 million available.

In fiscal year 1987, it is estimated that 156 housing facilities will receive loans valued at $2.9 million.

Coupled with the proposal to eliminate grants to organizations for farm worker dwellings, the elimination of Section 514 loans strikes a sharp blow to our farm laborers. From where do you believe funding will come to assure farm workers safe and affordable housing?

Answer: First of all, for the record, in fiscal year 1986, we financed 731 housing units, consisting of 8 labor housing facilities and 78 on-farm units. We anticipate financing approximately the same number of units in fiscal year 1987 at currently enacted budget levels.

As with our other housing programs, we cannot deny the need. However, I must return to my original point that we must simplify our housing assistance approach, get the cost of housing programs under control, and focus our attention on providing the most effective and efficient assistance possible within our resources. States like California and Florida are beginning to take direct responsibility for this segment of their population. We would encourage this approach rather than continuing a national program which has limited demand.

SECTION 515 - RURAL RENTAL AND COOPERATIVE HOUSING LOANS

Question: Section 515 loans provide moderate cost rental or cooperative housing for elderly, disabled, and low-income persons in rural areas. Only when other sources of financial assistance are not available will Section 515 loans be made available.

In fiscal year 1986, over 21,000 housing units were supported through loans totaling $650,000,000. In fiscal year 1987, about one-quarter of the previous year's new housing units will be supported by $167,000,000 in Federal loans.

The President's budget proposes a voucher program of $378,130,000 in fiscal year 1988. This amount does not approach the fiscal year 1986 housing loan program. How many units of housing will the voucher program support in fiscal year 1988?

Answer: We anticipate that $378 million will provide sufficent resources for 21,200 units for a 5-year period.

Question: Will priorities be given to uses of voucher payments so that all the needs of elderly, disabled, and low-income rural residents are met?

Answer: The order of priorities for the use of the voucher program are proposed to be 1,200 units set-aside for families from prepaying projects; renewal of expiring rental assistance for elderly, disabled and other low and very low-income tenants in FmHAs rental projects; and other very low-income rural families.

Question: Where will financial support for badly needed new construction units in rural areas come from?

Answer: While we recognize that some rural areas may need new units, many areas have vacant units. Also, the financing of needed units can generally be accommodated by the other credit institutions if there is a proven measure of affordability. We consider it a higher priority to assist very low-income families in accessing those vacant units rather than providing construction subsidies with the long term financial commitments associated with such programs.

Question: It is estimated that between 1986 and 1990, there will be a housing shortage in rural areas of some 375,000 units. Without cooperative housing loans, how will this situation be rectified?

Answer: The sad truth is that with or without FmHA's housing loan and grant programs there will be a housing shortage in some rural areas. Again, our intention is to focus our time, energy, and resources on providing housing assistance to very low-income families through the housing voucher program.

SECTION 524 - SITE LOANS

Question: The President's Budget proposes termination of section 524 loans used to aid in the purchase and development of land subdivided into building sites for low to moderate income rural residents. Only $574,000 was made available for this program in the current fiscal year. No funds were provided in fiscal year 1986. How many families will be assisted by section 524 loans in fiscal year 1987?

Answer: Early communications with several of our State Offices suggest that four section 524 loans will be obligated during fiscal year 1987. These loans will provide building sites for approximately 57 rural sites.

Question: Will these families receive loan or grant assistance from other rural housing program concurrently with section 524?

Answer: Yes, a majority of the families receive a section 502 loan to finance their homes. Most of them will also receive an interest credit subsidy with their loans.

Question: If this program is terminated, will a "gap" in housing assistance for rural areas exist?

Answer: The private sector and two national non-profit organizations, Housing Assistance Council and Rural America, Inc., are currently providing needed assistance in most of rural America. Also, it would be expected that the States would provide some assistance, if needed.

SECTION 521 - RURAL RENTAL ASSISTANCE PAYMENTS

Question: During Fiscal Year 1986, 14,511 families received rental assistance payments commensurate with their income. Generally, this program assures that affordable housing continues to be available to very low-income and low-income rural families.

In fiscal year 1987, funding is maintained at the fiscal year 1986 level of $160,000,000. If rural rental assistance payments are no longer available, what recourse will the 14,511 families currently receiving Section 521 benefits have?

Answer: Families eligible for rental assistance renewals would be high on the priority list for assistance through the voucher program. In the case of 14,511 families assisted this fiscal year, it will be another five years before their assistance may need renewing.

In addition, one of the legislative amendments to Section 8(o) of the U.S. Housing Act of 1937 that we have identified as necessary, is language to "grandfather" Title V assistance recipients into the voucher program, similar to the manner families previously assisted under other Section 8 programs. As currently legislated, vouchers would be restricted to very low-income tenants only, while approximately 25 percent of the rental assistance households are above the defined limit for very low-income rental assistance.

Question: How would the Administration's proposed voucher program offer greater choice to current rental payment recipients.

Answer: Two key components of the voucher program are its portability that provides options to assisted families in where they live and the choice available to voucher recipients in terms of percent of income they pay for housing.

Question: Would the voucher program be structured to give these families priority over others?

Answer: As I mentioned earlier, such families would be among our top priorities.

Question: Would the voucher program provide rental assistance to very low-income and low-income families?

Answer: With the legislative amendment to Section 8(o) referred to earlier, tenants currently assisted by FmHA will be able to continue to be assisted, even if they do not meet the very low-income definition. New beneficiaries would be required to meet the defined income limits for very low-income.

Question: How many of each could be accommodated by the voucher program?

Answer: With 21,200 units available, 1,200 would be set-aside for existing tenants in prepaying projects. Of the 20,000 units remaining, an estimated 12,000 would be used for rental assistance renewals, with the balance going to "new" families.

Based on the tenant information we have available, 25 percent of our 350,000 units are occupied by families that are above very low income; so approximately 25 percent of both renewals and prepayments would be low income, or 3,300 families. The balance, 17,900 vouchers, will go to very low-income families.

Question: Will legislation be required to make adjustments to the voucher program in order to meet the needs of both very low-income and low-income families currently covered under FmHA housing programs?

Answer: Yes, legislation would be required in the form of a grandfathering provision for Title V assisted families comparable to the authorities HUD has for Section 8 assisted families.

Question: How many rental assistance contracts expire in fiscal year 1988?

Answer: Approximately 12,000 rental assistance contracts will expire in fiscal year 1988.

Question: If the current 14,511 families receiving rental assistance are brought into the voucher program, won't this mean that rather than making 21,200 housing units available, only 6,689 housing units will be made available in fiscal year 1988?

Answer: No, an estimated 12,000 vouchers of the 21,200 vouchers will be needed to continue assistance to eligible families now being assisted with contracts that will expire in fiscal year 1988?

Question: How does this effect the overall shortage of rural housing and the need for assistance by over two million families?

Answer: It provides assistance to over 8,000 additional families, protects 12,000 families from losing assistance, and protects 1,200 families in the event of prepaying projects. In terms of assistance to very low-income families, this is comparable to our current rental assistance program.

SECTION 516 - RURAL HOUSING GRANTS FOR DOMESTIC FARM LABOR

Question: Section 516 of the Housing Act of 1949 gives FmHA the authority to share the cost of providing low-rent housing, basic furnishings, and safe, affordable facilities for use by domestic farmworkers.

Grants may not exceed 90 percent of the total development cost of farmworker housing projects, and rents may not exceed levels established by the Secretary.

In fiscal year 1986, with $10.8 million obligated, 560 new units and rehabilitation of 93 units were provided for domestic farm labor.

The administration has proposed a rescission of $7.4 million of the $9.5 million appropriated for Section 516 grants in fiscal year 1987.

If this recission were adopted by Congress, how many units of housing for farmworkers would be constructed or rehabilitated in fiscal year 1987 with remaining funds?

Answer: If the funds are rescinded, we could finance approximately 160 with a combination of loan and grant funds.

Question: If the rescission is not acted upon, and the full $9.5 million is available, how many units will be constructed or rehabilitated?

Answer: With full use of the available loan and grant funds, we could finance approximately 630 units.

Question: How many grants have been approved in fiscal year 1987 to date?

Answer: At this time, we have authorized 3 grant projects and 3 loan-only projects to proceed towards obligation. These facilities will provide 189 units for $2.4 million in grants and $6.1 million in loans of which 98 of these units are also to be deeply subsidized through rental assistance.

Question: How many grants are pending?

Answer: Beyond the projects noted before, 8 projects are in various application development stages or under review.

Question: Were this program to be terminated, from where would housing assistance for domestic farmworkers come?

Answer: Let me reiterate what I've said before. We are proposing a voucher program as the most effective and efficient type of housing assistance we can afford to provide if we are to do our part in helping reduce the bulging Federal deficit. Currently assisted farmworkers and other very low-income farmworkers will be eligible for the voucher program.

Question: How many domestic farmworkers are there in the United States?

Answer: Based on a 1983 study by USDA's Economic Research Service and a late summer survey by USDA's Crop Reporting Board, Statistical Reporting Service, there are between 2.6 million and 4.1 million domestic farmworkers.

Question: Approximately how many units of housing do they require each year?

Answer: At this time, we are unable to provide this estimate.

Question: Approximately how many temporary farm laborers also require housing assistance?

Answer: The Department of Health and Human Services estimates that there are 839,000 migrant farmworkers. Based on surveys in the late 1970s, the estimated demand for migrant farmworker housing was for about 800,000 persons.

Question: How many units of housing do they require per year?

Answer: The best estimate we have indicates that some 800,000 migrant farmworkers need housing. Migrant farm labor housing is particularly difficult to provide because of its generally short occupancy period and the poor economics associated with it. In addition, each migrant may need up to four units as he or she moves to different employment areas. Therefore, the number and size of units needed is difficult to estimate; more so, when the composition of the migrant farm labor force is not known accurately.

SECTION 523 - MUTUAL AND SELF-HELP HOUSING GRANTS

Question: In fiscal year 1986, $7.6 million was appropriated and $5.8 million was obligated for mutual and self-help housing grants. These funds enabled 1,200 families to build their own homes through mutual efforts and labor. The Administration has proposed to rescind the $8 million appropriation provided by Congress for these grant programs. Would unobligated funds from prior years be brought forward to assist families in this fiscal year?

Answer: Yes, as a matter of fact, at the beginning of the first year we brought forward $5.4 million in prior year unobligated funds.

Question: How many families will receive grant awards for housing projects in fiscal year 1987? In how many different states?

Answer: It is estimated that 32 grantees in 23 states will afford around 1,100 families the opportunity to acquire home ownership through the mutual self-help housing grant program.

SECTION 504 - VERY LOW-INCOME HOUSING REPAIR GRANTS

Question: Grants for housing repairs for very low-income families received an appropriation of $12.5 million in fiscal year 1987. The Administration has proposed to rescind $9.4 million of fiscal year 1987 funds and would terminate these grants in fiscal year 1988.

In fiscal year 1986, almost, 3,900 very low-income families were assisted by this grant program through appropriations of $13.9 million. If the rescission of fiscal year 1987 funds were approved by Congress, how many families would be assisted with housing repair grants?

Answer: If the rescission was approved, 940 families would be assisted with very low-income housing repair grants

Question: If the full $12.5 million were made available, how many families would be assisted in fiscal year 1987?

Answer: If $12.5 million were made available, 3,800 families could be assisted in fiscal year 1987.

Question: Without repair grants for very low-income housing, how could we be assured that basic structural and sanitary needs of rural residents could be met?

Answer: With the housing voucher program, persons living in substandard housing needing repair would have the financial resources to move into housing that would meet their basic needs.

SECTION 533 - RURAL HOUSING PRESERVATION GRANTS

Question: Rehabilitation of single family housing owned by low-income and very low-income families is provided through grants of $19 million in fiscal year 1987. At this funding level, 4,100 homeowners are expected to receive assistance. If the Administration's requested rescission of $14.4 million were adopted by Congress, how many families could receive rural housing preservation assistance?

Answer: Based on the restrictions in the program limiting administrative costs to 20 percent, and the priority for leveraging other assistance, we estimate about 980 units being assisted.

Question: If the fiscal year 1988 recommendation to terminate this program were adopted, would USDA recommend that the voucher program be expanded to include housing preservation and rehabilitation authority necessary to assure safe and sanitary housing to rural very low-income and low-income residents?

Answer: At this point, such would not be our recommendation. It is our intention to provide vouchers as a simple direct housing assistance program and as a substitute for all our present housing programs.

Question: Section 533 provides grants for Single Family Housing owned by very low-income and low-income families. In justifying termination of this program, the statement is made that "families eligible to be assisted under this program may request assistance under the housing voucher program which provides housing assistance more efficiently and offers a greater choice of housing opportunities to the program recipients." How would this be accomplished specifically under the current housing voucher authority?

Answer: The rural housing preservation grant program, as we know it today, would be terminated. However, units assisted under the FmHA program or other continuing private or state endeavors would qualify for the rural housing voucher program.

SECTION 8(o) - RURAL HOUSING VOUCHER PROGRAM

Question: Please describe the scope of the Section 8(o) voucher program proposed by the Administration for rural areas.

Answer: A great deal of my testimony has been in response to questions about various aspects of the voucher program. As proposed in the President's Fiscal Year 1988 Budget, we are seeking an appropriation to operate a rural Housing Voucher program under Section 8(o) of the United States Housing Act of 1937, as amended. As such, the scope of our proposed program is to follow the same income and administrative guidelines established for the voucher program by the Department of Housing and Urban Development.

Question: The Administration has not proposed legislation to implement Rural Housing programs under a voucher program. Do you believe legislation is necessary?

Answer: Beyond the appropriation language accompanying the Budget, we have identified the need to request an amendment to Section 8(o) to grandfather families currently being assisted under other programs, such as our Section 521 rental assistance program, to be eligible for a housing voucher. The current Section 8(o) restricts assistance to very low-income families, except those previously assisted under Section 8. We would seek the same administrative flexibility in order to be able to continue assistance to low-income eligible families in our rural rental and farm labor housing programs.

Question: How will the goals of current FmHA programs be acheived if the voucher program were implemented without legislative changes? Please respond by including reference to: housing repair and improvement loan and grant programs; general purpose loans; domestic farm labor housing loans and grants; mutual and self-help grants; loans for rental or cooperative housing unit construction; and rental assistance to very low-income and low-income families.

Answer: The individual programs will not be replicated under the proposed voucher program. We are making a specific effort to simplify our assistance to very low-income rural families and to focus our efforts on serving such families in the most administratively and cost effective manner possible. We believe the voucher program will enable us to do that.

Question: How will the voucher program assure that very low-income and low-income rural families are living in safe and sanitary housing?

Answer: Earlier, I indicated that there were some 640,000 year round units available for rent in rural areas served by FmHA. These units and vacant units in projects financed by FmHA are a substantial stock of housing available for use by families under the voucher system. As operated by HUD and proposed to be operated by FmHA, local public housing agencies would be responsible for assuring that the housing units in which holders of vouchers live are in safe and sanitary condition.

Question: Under current voucher authority, will eligible rural households receive vouchers for repair and improvement of dwellings that they own?

Answer: No, they will not.

Question: Under the proposed voucher program, will new housing construction be encouraged for rural residents?

Answer: The proposed voucher program would not directly encourage construction of new housing.

Question: What other federal programs will assist low-income and very low-income rural families in purchasing new dwellings?

Answer: To my knowledge, there are none. And, in our view, the current FmHA programs doing so are both administratively expensive and long-term budget busters. Let me mention again that the Rural Housing Insurance Fund, through which we provide such loans, is facing a serious deficit itself. The need for its reimbursement will continue far into the Twenty-first Century, with a requested appropriation for losses and rental assistance for fiscal year 1988 of $3.1 billion, even without financing any additional units.

RURAL DEVELOPMENT ACTIVITIES

Question: How many loans and grants have been made as authorized by section 1323(b) of the Food Security Act of 1985.

Answer: No new loans have been made from the Rural Development Loan Fund. The current balance available for this program is approximately $4.2 million. In addition, no loans and/or grants have been obligated to nonprofit national rural development and finance corporations as of March 11, 1987. The current balance available is approximately $19.1 million for loans and $14.3 million for grants.

Question: What is needed to facilitate the administration of these programs so that the money is used for its intended purposes?

Answer: Initial regulations to implement the nonprofit National Corporation's Loan and Grant Program were issued earlier this year and we are currently accepting applications. The provisions for using grants from this program for capitalizing revolving loan funds and reauthorization of loans from the Rural Development Loan Fund from repayments to such fund, as contained in Section 1323 of the Food Security Act of 1985, as amended, need to be incorporated into FmHA Instructions. These changes will be implemented in regulations now being written.

Question: Has the Department explored working with the Environmental Protection Agency to use these funds to help rural communities to comply with the Safe Drinking Water Act.

Answer: Yes. One of the eligible purposes for which the FmHA assistance is available is pollution abatement which would coincide with the objectives of the Safe Drinking Water Act. FmHA Instruction 1980-G requires the primary recipient of the FmHA assistance to further provide the FmHA assistance to its borrowers in an amount equal to no more than 75 percent of the total project cost or $500,000, whichever is less. The remaining funds must come from other sources which could include those available from the EPA.

Question: What other possible uses has the Department identified for these funds?

Answer: Other than the purposes specified by the enabling legislation section 1323 of the Food Security Act of 1985, all purposes specified for the business and industry loan program are also eligible purposes for these programs.

FISCAL YEAR 1988 BUDGET - GENERAL

Question: Mr. Clark, your testimony indicates that you are requesting $4 billion for the Agricultural Credit Insurance Fund out of a total program of $4.4 billion. These figures reflect changes in legislation which you proposed to request. This Committee has consistently asked you to propose a budget based on current law.

Would you please tell the Committee what the numbers are under current law for the Farmers Home Administration, and in particular, for the Agricultural Credit Insurance Fund?

Answer: The Food Security Act of 1985 authorizes $1 billion for insured loans in fiscal year 1988, of which $130 million will be used for farm ownership loans. It also authorizes $3 billion for guaranteed loans, of which $390 million will be designated for guaranteed farm ownership loans. Emergency disaster loans are authorized in the amount of $600 million. The interest rate buy-down program began with an amount of $490 million over a three year period beginning in fiscal year 1986. Of this amount, we estimate that we will obligate $185 million in fiscal year 1988.

In addition, a housing voucher program authorized under Section 8 (o) of the United States Housing Act of 1937, as amended, will be implemented in fiscal year 1988 in the amount of $378.1 million.

Question: How do you get to a total of $4.4 billion for a program budget for fiscal year 1988? Does this include Salaries and Expenses? Does this figure include your housing voucher program?

Answer: The total FmHA appropriated program level of $4.4 billion in fiscal year 1988 consists of $3.5 billion for farm operating loans and $.3 billion for emergency disaster loans. The interest rate buy-down program's fiscal year 1988 allocation is $.2 billion. In addition, the housing voucher program will be funded in the amount of $.4 billion. It does not include Salaries and Expenses.

INTEREST RATE BUY-DOWN

Question: You indicate in your testimony that you are requesting $185,000,000 for the third year of the interest buy-down provision of the Farm Bill. Under what appropriation authority do you spend the money on this appropriation?

Answer: Section 1320 of the Food Security Act of 1985, Public Law 99-198, authorized an interest rate reduction program for guaranteed loans. This authorization set forth the total amount of funds to be used by the Secretary as not to exceed $490, million for the three year program period.

Question: Could you please provide the committee with the detail of how much money has been spent on this program for fiscal year 1986 and 1987?

Answer: During fiscal year 1986, 1,574 loans were processed under the Interest Rate Buy-down Program for $9.5 million in interest subsidy payments.

Through February 26, 1987, 772 loans were processed under the Interest Rate Buy-down Program for $5.8 million in interest subsidy payments.

Question: Has the program been successful? Please explain why or why not?

Answer: Although we are disappointed with the slow start of the Interest Rate Buy-down Program, we find that lenders are utilizing the program more as their participation in the guaranteed loan program increases and as they become more familiar and gain more exposure to the program.

FARM FINANCE ISSUES

Question: Several proposals have been submitted in the 99th and 100th Congress to establish a secondary market for agricultural real estate loans. The proposals, generally, would create a market to better enable commercial banks to make long-term agricultural real estate loans. Some observers suggest that small agricultural banks are generally not in that market for two reasons: (1) small banks' ability to secure a large volume of funds for long-term lending is constricted by the very size of the banks and their relative anonymity in money centers, where large amount of funds can be obtained by well-known, large organizations, often with a Government sanction, and (2) without a comparable association with the Government, small banks cannot compete with the Farm Credit System's relatively low cost of funds structure, which is attributed to its implied Government backing. Under the proposals, the Federal Government would, indeed, accept varying degrees of risk, much like it does through its perceived or actual backing of securities issued by secondary markets for residential real estate loans.

What is the Administration's position on supporting such a concept, and what drawbacks would be created by such a market?

Answer: The Administration supports the concept but does not support Federal involvment in the creation or operation of a secondary market. Any such market, if created, should be funded and operated entirely by the private sector financial institutions.

Question: How would such a market affect FmHA, the Farm Credit System, and other private agricultural lenders.

Answer: We speculate a secondary market for agricultural real estate loans would allow private agricultural lenders to provide a full line of credit services, including real estate loans, to its customers at reasonable rates and terms because of access to institutional investors through money center capital markets.

FARM LOAN GUARANTEES

Question: In an attempt to reduce direct Federal involvement in farm credit assistance, FmHA is attempting to shift its emphasis from direct to guaranteed loans. Through the Food Security Act of 1985, the Congress supported this shift in emphasis. Within an annual funding authorization of $4 billion for fiscal years 1986 through 1988, the mix between direct and guaranteed loans shifts from an even split in fiscal year 1986 to a 25 percent direct 75 percent guaranteed loan mix by fiscal year 1988.

Lenders in some states, make extensive use of guarantees but in other states little guarantee activity exists. To increase lender participation, FmHA has taken steps such as instituting an approved lender program, streamlining loan processing procedures and encouraging its own staff in the field to place more emphasis on loan guarantees.

What is FmHA doing to increase participation of private lenders in providing agricultural credit in areas where FmHA provides a high precentage of total farm credit?

Answer: FmHA has taken several steps to increase participation in agricultural lending by private credit sources. FmHA guaranteed loan applications are being processed faster. FmHA is now guaranteeing operating lines of credit. In addition, the interest buydown program is being utilized to permit borrowers to obtain lower interest rates for up to three years. This program allows FmHA to pay a lender up to 50 percent of the reduced interest rate, not to exceed two percent. Such lower rates of interest will assist with cashflow and allow borrowers to establish a more sound financial base.

FmHA is making an all out effort to inform banks of the guaranteed loan programs and help them prepare guaranteed loan requests by use of operation assist. By assisting applicants and lenders in preparing guaranteed loan packages, we expect to increase participation in the guaranteed loan and interest buydown programs. FmHA believes banks will respond to the guarantee program as they become more and more familiar with the options available to them and the reduced risk and profits that the guarantee provides.

FmHA works with State Banking Associations on an ongoing basis to encourage private lenders to participate in the FmHA guaranteed loan programs.

Question: What are some of the obstacles FmHA is encountering in its efforts to obtain more private lender participation in loan guarantees?

Answer: The major obstacle the Agency is encountering in getting more private lender participation in the loan guarantee program is related to the generally depressed state of the agricultural economy and lenders reluctance to make agricultural loans.

Lenders are also reluctant to participate in the program because of the additional paper work and time involved in processing a guaranteed loan. We believe, however, that the additional paperwork required over what a prudent lender would require to make a loan without a guarantee is minimal. For approved lenders the required paperwork and the time required for approval are both reduced.

Lenders are not fully aware of the potential profit that they can earn with minimal risk when the guaranteed portion of the loan is sold to the secondary market. We are continuing our ongoing efforts of informing lenders of the advantages of the guaranteed loan programs.

Question: What incentives beyond persuasion has FmHA considered and tried in order to increase private lender participation in loan guarantees?

Answer: We are continuing to work with lenders to make the guaranteed loan programs more acceptable to them. Some of the advantages of participation include more timely processing, quicker loss settlements, and early settlements in bankruptcy cases.

We have also established the Approved Lender Program, guarantees on operating lines of credit, and the interest buydown program in order to encourage lenders to participate in the guaranteed loan programs.

We are emphasizing Operation Assist, where a County Supervisor develops a loan docket with the borrower. The borrower and County Supervisor then meet with a prospective lender and review the proposal. The lender then makes a decision as to whether or not he will make the loan with the FmHA guarantee. We have found that this program has increased lender interest in participation in the guaranteed loan programs.

Once lenders realize the benefits of a 90 percent guarantee and the profitability of marketing these loans in the secondary market, we believe they will participate to a greater extent.

Question: Do Farm Credit System lenders (Federal Land Banks and Production Credit Associations, in particular) utilize FmHA loan guarantees in a significant way, and is their participation more or less than other commercial lenders?

Answer: Farm Credit System lenders have been participating in the guaranteed loan programs. However, their participation has not been as extensive as other commercial lenders.

FmHA has an excellent working relationship with the Farm Credit System throughout the country. We believe that through our continued efforts to inform lenders of the guaranteed loan programs, the participation of the Farm Credit System will increase.

Question: What is the level of participation in the Approved Lender Program, and has this program helped increase loan guarantee use?

Answer: As of December 31, 1986, there were 2,287 lenders participating in the Approved Lender Program. Under the Approved Lender Program the paperwork required of lenders is lessened, and lenders are assured of faster approval of loans submitted for guarantee. This has helped to increase the use of the guaranteed loan programs.

Question: What steps has FmHA taken to encourage or require its County Supervisors to more actively pursue loan guarantees for financially-stressed farmers as opposed to continuing to emphasize direct loans?

Answer: For several years, State Directors have been actively promoting the guaranteed loan programs. They have involved the County Supervisors at the local level in conducting seminars and training for lenders on the benefits of the guaranteed loan programs. County Supervisors are also well aware of the Agency's goal to move from insured to guaranteed loan programs and are being required to utilize Operation Assist to promote the use of the guaranteed loans.

Question: What steps has FmHA taken to assure that lenders meet their servicing responsibilities for guaranteed loans?

Answer: FmHA regulations require the Agency to monitor the lenders servicing activities at least annually. If it is found during that review that the lender is not properly servicing the loans, the servicing deficiencies will be discussed with the lender. Also, at that time the lender will be put on notice that any losses caused by the negligent servicing will result in FmHA not honoring its guarantee for the amount of the loss caused by the lenders negligent servicing.

Question: What steps has FmHA taken to assure that loan guarantees actually help financially-stressed farmers instead of being a mechanism for private lenders to transfer their bad debt to the government?

Answer: FmHA evaluates loans presented to the Agency on which the lender is requesting a guarantee. If the loan has credit weaknesses that would indicate the applicant did not have a reasonable chance to succeed and repay the loan requested, FmHA would reject the lenders request for a guarantee.

QUESTIONS SUBMITTED BY SENATOR SASSER

FUNDING FOR WATER AND WASTE SYSTEMS

Question: Mr. Clark, you have stated that the Farmers Home Administration 1988 Budget "is designed to meet the most basic needs of rural America". While the Administration's budget does attempt to focus on the need for adequate housing, this budget would eliminate water and waste disposal loans and grants. I consider clean water and adequate sewage and water treatment facilities to be basic needs, as I believe most of us do. I cannot agree with a budget directed at improving rural communities when that budget will not provide sufficient funding for clean water or adequate sewage treatment. Further reductions of $27 million in water and waste disposal loans have been asked for in Farmers Home supplemental requests. I find these requests unacceptable. Where will the funding for adequate water and waste disposal systems come from for many of these rural communities, if not from Farmers Home.

Answer: Rural communities will rely on the private sector, grants administered by the Environmental Protection Agency, other Federal Agencies, and State Funding.

PROPOSED REGULATIONS

Question: Mr. Clark, the Farmers Home Administration has announced new credit regulations for those seeking loans. I am told by farm credit officials in Tennessee that these regulations, because of the income/debt ratios for preapplication screening, may eliminate as many as 20 percent of those famileis previously eligible for Farmers Home loans.

The intent of Congress is establishing the Farmers Home Administration was to provide a creditor for those family-size farmers who cannot obtain credit elsewhere. Some of the small farmers who have made it through the tough times so far are now turning the corner towards prosperity, but would fall into the income/debt ratio which eliminates them from loan eligibility if they were to apply for loans under the new regulations.

With the proper guidance, these farmers will be able to make a profit soon, but not without assistance from Farmers Home now. I am worried that these new regulations are going to force many farmers, who would otherwise have a future in farming, into foreclosure. Do you also see this happening as a result of these new regulations?

Answer: The proposed regulations published on January 15, 1987, proposed to use two sets of ratios to determine the risk to the taxpayers by extending credit to applicants. One set of ratios will be used to screen preapplications, however, the income/debt ratio is not one of the ratios that would be used for that purpose. The three ratios FmHA proposed to use in the preapplication screening process are: (1) total liabilities to total assets, (2) net cash farm income (before interest payments) plus nonfarm income minus family living expenses to total assets, and (3) current assets to current liabilities.

These ratios measure the proposed operation's solvency, profitability, and liquidity. These ratios point out the financial weaknesses that the operation is experiencing. In some cases where there is a negative ratio, a restructuring of the financial aspects of the operation may allow for a reasonable chance of success. If the proposed operation cannot show that it is solvent or profitable and there is no way to restructure the debt, then and only then, will assistance be denied.

We also proposed a final risk index to be applied after the loan docket is developed. These ratios will surface any weaknesses in the proposed operation and will help reduce unnecessary risk to the Government. This risk index consists of three financial ratios which are: (1) total liabilities to total assets, (2) net cash farm income (before interest payments) minus family living expenses to total assets, and (3) balance available for debt payments to total payments due.

These ratios measure the applicant's solvency and profitability and are based on the proposed farm plan for the upcoming year. By using these ratios, FmHA would be able to identify those applicants who do not have operations which have a reasonable chance to succeed. This would reduce the cost to the Government by making loans only to those applicants who have operations that are solvent, profitable, and can service their debts. The ratios would not in our opinion deny credit to applicants with a future in farming who could not obtain credit elsewhere.

The proposed regulations will be revised to exclude present FmHA borrowers from the pre-application risk evaluation and to include nonfarm income in the return on asset ratio in the pre-application risk evaluation.

HOUSING SHORTAGE

Question: Mr. Clark, you have stated that the deficiency of adequate housing in rural communities is created by income deficiency in these areas. While I do not disagree with this assessment, estimates from the Congressional Research Service have indicated that rural communities across America will be 75,000 units short of adequate housing for each of the next four years.

Farmers Home is moving in the direction of more guaranteed loans and emphasis on funding the Agricultural Credit Insurance Fund. Do you believe these actions will make any appreciable dent in the shortage of housing units?

Answer: FmHA's fiscal year 1988 Budget proposals will not directly address the supply of housing units. FmHA, however, has an analysis performed by the Economic Research Service based on the 1980 Census which indicates that there were 640,000 year round units available to rent in rural areas. We maintain that the critical issue is affordability of housing by very low-income families. Our proposed housing voucher program is proposed to make available rental units affordable for such families.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

CREDIT AVAILABILITY

Question: Mr. Clark, I am growing increasingly concerned that the Farmers Home Administration is continuing to place a greater and greater emphasis on guaranteed farm operating loans rather than on direct loans. No matter how much you may suggest it is working, the guaranteed loan program is unfortunately a dismal failure in Arkansas. A farmer who is currently strong enough to be with a bank may be a recipient of a guaranteed loan, but no bank will pick up a former direct borrower of the FmHA just because of the guaranteed program. Therefore, FmHA will only be of assistance to a few lucky direct borrowers and financially strong borrowers already with other lenders. Where do you, therefore, propose new and young farmers should turn for help, without the availability of the FmHA direct loan program?

Answer: We do not see the guaranteed loan programs as being a failure in Arkansas. The use of the guaranteed loan program is increasing nationwide as well as in Arkansas. As of March 10, 1987, $7.2 million in guaranteed operating loans had been obligated compared to $1.1 million as of the same date last year. This is a 555 percent increase.

It is our belief that once lenders in Arkansas become more familiar with the benefits of a 90 percent guarantee and the profitability of marketing these loans in the secondary market they will participate to an even greater extent.

Question: When banks are simply unwilling to take on the additional risks of lending to farmers through the guaranteed program, and with very limited or no direct loan money available, how do you propose that the FmHA can possibly be an effective lending source at a time when credit is especially tight due to low prices, the 60 percent decline in equity values since 1981, the specter of Chapter 12, the refusal of the USDA to honor contracts, as in

Arkansas, and the non-assignability of commodity certificates which make up half of the deficiency payments?

Answer: I have to disagree with you, Senator. The use of the guaranteed loan program is increasing every year. For example, $1.1 billion in guarantees were issued in fiscal year 1985 and $1.4 billion in fiscal year 1986 for operating loans. To date in fiscal year 1987, operating loan guarantees are currently ahead of fiscal year 1986 by 31 percent.

We recognize that many guaranteed lenders are concerned about the provisions contained in the Chapter 12 Bankruptcy Act, and how these provisions will affect the guarantee. In response to this concern, the Agency is in the process of reviewing regulations which would allow the Agency to pay a lender an estimated loss at the time the Chapter 12 bankruptcy plan is confirmed and pay the final loss claim at the time the loan is liquidated or paid-in-full.

Question: How much of the guaranteed authority for FY 87 has actually been used to date?

Answer: As of March 10, 1987, the Agency obligated 3,676 guaranteed operating loans for $374,215,000, compared to 2,519 loans for $285,174,000 as of March 10, 1986. To date in fiscal year 1987 loan guarantees are currently ahead of last year by 31 percent.

As of March 10, 1987, 859 guaranteed farm ownership loans for $130,085,000 were obligated compared to 190 loans for $26,471,000 as of March 10, 1986. To date this year loan guarantees are currently ahead of last year by 391 percent.

GUARANTEE FEE

Question: Why does the FmHA charge a 1 percent origination fee to banks for making guarantees? This charge is simply passed on to the farmer borrower.

Answer: The Consolidated Farm and Rural Development Act authorizes the Secretary to charge loan origination fees to lenders which may be passed on to the borrower. The fee helps FmHA defray the costs of loan origination and program losses.

FmHA's recently implemented line of credit authority for operating loans prevents farmers from paying repetitive guarantee fees which they would have to pay if they were to receive several guaranteed loans. Under this authority a lender can advance a borrower's operating expenses up to three years from the date such an agreement is entered into.

Question: I understand the interest subsidy program, which was originally used with the guarantee program, is still authorized. What is your view of reimplementing this program in lieu of the interest rate buy-down?

Answer: For operating loans, Section 316 of the Consolidated Farm and Rural Development Act states that the interest rate on any guaranteed loan shall be such rate as may be agreed upon by the borrower and lender, but not in excess of the rate as may be determined by the Secretary.

Although the Secretary has the authority to implement a subsidy program in connection with loan guarantees, we believe that the Interest Rate Buydown program is more equitable since only those borrowers in need of the interest rate reduction are eligible.

Under the Interest Rate Buydown Program applicants must demonstrate the ability to effect a permanent debt reduction, since repayment ability is required after the buydown period expires. A subsidy program could result in financing inefficient farming operations.

The Interest Rate Buydown Program requires a matching interest rate reduction by the lender, while the subsidy program does not require the lender to absorb a portion of the cost. Therefore, we believe that the Interest Rate Buydown program is more equitable and cost effective.

ALTERNATIVE FORMS OF FINANCING

Question: Have you considered offering 100 percent guarantees or the option of banks selling the paper back to the agency after a period of delinquency, as the SBA does?

Answer: FmHA has not considered offering 100 percent guarantees because the Agency views the program as a contract between private sector lenders and FmHA in which both parties assume some of the risk associated with the loan and both derive benefits from the program. FmHA makes loans through the guaranteed Program without a direct outlay, except for losses, which will help balance the Federal budget. The lender makes loans through the guaranteed program that he would be unable to make under his normal banking policy and is able to raise funds through the secondary market to fund those loans. This affords the lender the opportunity to increase income for the bank with very little risk associated with the loan. The lender is able to more fully service his customers by making larger loans than the bank's normal lending limit would allow. He can also make loans on a much longer term than he would be able to make without a loan guarantee. FmHA takes the position that the lender should have some risk in the loan for the benefits afforded to the lender through the guarantee. The lender will do a better job of servicing the loan if he has some financial interest at stake in the loan.

FmHA believes that many of the advantages of having the guaranteed programs would be lost if the Agency bought the loan back from the lender, when the loan went into default, and conducted the liquidation.

One of the reasons FmHA went to the guaranteed program was to make maximum use of its resources to better serve those in need of FmHA services. If FmHA were to conduct the liquidation itself, in the event of default, the Agency would have to significantly increase its staff. In addition, the lender is familiar with the history and background of the loan and should maximize the recovery from the liquidation. If FmHA was to conduct the liquidation, it would also face many legal complexities in getting the instruments supporting the loan properly assigned to it in order to conduct the liquidation.

Question: The FmHA has strongly pushed alternative forms of financing, but it appears that the agency refuses to participate in some of these conditions itself. For instance, banks will be required to write off debts and lower interest rates in exchange for the FmHA offering guarantees, subordination or interest rate buydowns. However, the FmHA will not consider writing off debt owed to the agency so that the farmers in question can show cash flow and total repayment ability, and therefore, continue with the FmHA. Why is that?

Answer: The Agency is presently considering, for the direct loan programs, to offer a write-down of a borrower's debt to the market value of the security in order to continue with the account, when it is in the best interest of the Government. The debt written down would be set-aside in a noninterest bearing note and would be due when the indebtedness matures or when the property is sold and recovery is greater than the market value at the time of the write-down.

Question: In Arkansas, nearly one-fourth of all borrowers have received adverse action notices and 52 percent of these were forced into bankruptcy, foreclosure or voluntary conveyance. Another 1000 to 1200 cases are expected in my state this year. We have found that the program has eliminated all discretion with local and state FmHA employees to work with borrowers in an attempt to save their farms. The servicing option of deferral is useless under current FmHA guidelines, and voluntary conveyance is usually the only ultimate option. However, the FmHA does not advise borrowers of the availability of the dwelling retention program or the land lease/purchase program. Why is that?

Answer: FmHA first wants to establish that a delinquent farm borrower can succeed through the use of the servicing options readily available. We do not want to encourage borrowers to liquidate their accounts prematurely if even a small chance exists that they may succeed and be able to repay the indebtedness owed to FmHA. Of those 2,185 FmHA borrowers in Arkansas who received adverse action notices in 1986, 252 or 11.5 percent of them liquidated their farming operations. Of the 252, 27.7 percent voluntarily conveyed property back to FmHA, 6.6 percent were foreclosed on by prior lien holders, 1.2 percent were foreclosed on by FmHA and 3.7 percent declared bankruptcy. Dwelling retention and the leaseback/buyback programs are intended to allow borrowers, after liquidation of their real estate, an option to remain on the farm without the burden of unmanageable debt. FmHA is presently considering the notification of borrowers regarding dwelling retention and leaseback/buyback at least annually.

Question: A borrower must answer these notices within 30 days or face foreclosure. We have cases in Arkansas where borrowers didn't answer in 30 days for meritorious reasons and who have the ability to pay current and stay current who are now being forced outsimply because of not responding within the 30-day period. If the agency really intended to help these farmers, wouldn't it accept these meritorious cases?

Answer: FmHA's programs are based on cooperation by the borrower with the local County Ooffice. These notices clearly inform the borrower of the time allowed to respond. The regulations were written to insure that all FmHA borrowers are treated equally. These cases place an unfair burden on the local County Supervisor to decide what reasons for not returning the form have merit and what reasons do not. We are considering a proposal that will permit borrowers to pay current, pay-in-full, refinance, voluntarily convey or process a transfer and assumption after acceleration of the account but prior to liquidation.

CASH RENT

Question: Under your proposed new regs, all farmers paying cash rent will be denied assistance. Why is that?

Answer: Due to the concerns raised on this issue, we have decided to modify our proposal to allow loan amounts for up to 50 percent of the total rental cash for cropping operations. The tenant will be able to borrow this 50 percent and apply it up front with the remaining 50 percent being released from crop proceeds. In those cases where it is customary for the area or the lease requires 100 percent cash rent up front FmHA will continue to provide funds as long as a feasible farm plan can be developed.

Question: Another concern of mine under the new regs is that the agency will reject the acceptance of applications once the initial allocation of funds to a state is exhausted, even if other funds are later allocated. Why is that?

Answer: Applications for federal assistance will not be accepted when a state is out of money. At the present time, farmers apply for help and are given false hope of receiving FmHA financial assistance. If a state receives additional funds, all farmers will be given an equal opportunity to apply for such funding.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

AVAILABLE FUNDS

Question: I have been notified by farmers in Idaho that there is an immediate need for the release of third and fourth quarter funds to provide farmers with operating funds for spring planting. I sent a letter to you last week requesting a transfer of these funds to the current quarter. Do you plan to release these funds this week? Please explain when you plan to release.

Answer: For those States which have exhausted their first and second quarter direct operating loan funds, we will provide funding, if the applicant is unable to obtain a guaranteed loan. Operation assist will be fully utilized. Operation assist is when FmHA assist the applicant in preparing the request for a guarantee loan and personally introduce the applicant to a local lender.

GUARANTEED LOAN PROGRAMS

Question: The Idaho FmHA office has been working with bankers in Idaho to encourage them to use the guaranteed loan programs to further the administration's program to decrease directlending in FmHA. Thus far the banks have not shown much interest in utilizing this program. Unless changes are made to the program I foresee continued non-use of this program: Why continue to increase guaranteed funds for a program that is not working? Do you plan to transfer funds from the guaranteed farm operating programs to direct farm operating programs this year to meet the expected demands for operating credit? When will this be done or if not, why not.

Answer: The guaranteed loan program is working. $1.1 billion in guarantees for operating loans were issued in fiscal year 1985 and $1.4 billion in fiscal year 1986. To date in fiscal year 1987, operating loan guarantees are currently ahead of fiscal year 1986 by 31 percent.

While section 1317 of the Food Security Act of 1985 allows the Secretary to transfer not more than 25 percent of the amounts authorized for guaranteed loans to insured loans, it is felt that such a move would weaken the progress that is being made in establishing a sound guaranteed program. To transfer funds would only serve to convince commercial lenders that FmHA is not serious about establishing a sound guaranteed loan program.

Many rural banks are now reporting that their loan-deposit ratio is at its lowest since the mid-1960's and they are actively seeking new farm accounts. In order to utilize this source of funding, FmHA is making an all out effort to inform banks of the guaranteed loan program and help them prepare guaranteed loan requests by use of Operation Assist. By assisting applicants and lender in preparing guaranteed loan packages, we expect to increase participation in the guaranteed loan and interest buydown programs. FmHA believe banks will respond to guaranteed program as they become more and more familar with the options available to them, and the reduced risk that the guarantee provides.

Question: Commercial banks have been encouraged by Congress and the Administration to use the guaranteed loan program for farmers they would not have lent to without the guarantee. With the new ruling by USDA's Office of General Counsel regarding non-payment for 3 to 5 years on a FmHA guarantee for a farmer filing Chapter 12 Bankruptcy, and continued slow processing of guaranteed loans even with the approved lender program, it appears that the rapid transfer of FmHA lending from direct to guaranteed lending may cause severe disruptions of lending to viable farmers in the near future. How does FmHA plan to handle these problems and maintain the viable farmers that they now have booked.

Answer: FmHA is presently reviewing its guaranteed loan regulations to find ways to better work with guaranteed loan lenders which will allow them to recover their losses more quickly when a borrower files a Chapter 12 petition. We are planning to pay an estimated loss claim at the time the Chapter 12 Bankruptcy plan is confirmed and pay the final loss claim when the loan is paid in full or liquidated. We think this will address the concerns that lenders have in regard to bankruptcy cases. We will honor FmHA guarantees and pay loss claims as long as the lenders service the accounts in accordance with the Lender's Agreement with FmHA. In addition, we are considering ways to speed up the processing of guaranteed loan applications.

Question: Idaho guaranteed operating loan funds for fiscal year 1987 was $19.6 million and funds of direct insured operating loans was $13.6 million. Why does Idaho have more on a percentage basis in guaranteed loan programs than other States such as North Dakota with $47.3 million in direct and $36.1 million in guaranteed. Texas has an approximate 50-50 ratio. My figures show that Idaho has used as of February 28, 1987, 99 percent of its insured farm operating allocation (now actually 100 percent) but have used only 9.3 percent of its allocated guaranteed operating funds. Would it not make more sense to allocate the funds expected to be needed for direct operating to direct operating until the guaranteed program is utilized by the commercial banking establishment.

Answer: In fiscal year 1987, allocating insured operating funds to the States was based in part on the amount of insured operating loan obligations of the previous fiscal year. Thus, funds are placed where there has been a demonstrated use in the past. It is important to note that the total available $2.17 billion for guaranteed operating loans is considerably larger than the total available $1.425 billion for insured loans, thus providing Idaho a larger amount of guaranteed funds than insured funds.

FARM CREDIT SYSTEM

Question: The Farm Credit System is in serious financial trouble. It is anticipated that they will need additional Federal legislation to prevent insolvency of several of the system banks. What implications would this have on the funding needs of FmHA? What other implications would this have for FmHA? What types of assistance would USDA find acceptable.

Answer: We are well aware of the serious financial trouble several of the Farm Credit System banks are experiencing. We are also aware of the possible need for legislation to prevent insolvency and we are examining options for providing Federal assistance.

DUE DATES OF FARM LOANS

Question: As I understand most of your loans are due on December 31, of each year. What is the rationale for this approach when farmers may plan to market their commodities and make payments on loans at other times during the year?

Answer: All farmer program loans require an annual payment with the first installment due January 1. Operating loans may be structured for repayment in accordance with the receipt of a farmers income. For example, an operating loan closed on March 1, may be scheduled for repayment with an interest installment due on January 1, of the next year, and the full installment due on March 1, one year from the date of loan closing.

Question: What prevents FmHA from writing loans with due date flexible to meet the marketing needs of their borrowers? What can be done to synchronize the payment dates with marketing periods?

Answer: We believe that the present system of scheduling payments allows for the marketing of crops and livestock and is more flexible than scheduling payments due at specific dates during the year. Therefore, our loan notes provide the flexibility necessary to meet the marketing needs of our borrowers.

Question: Would this not help eliminate or reduce the backlog of processing occuring at the Kansas City Finance Center?

Answer: We are not aware of any backlog of processing of payments at our Finance Center.

FINANCIAL STATEMENTS

Question: Several years ago FmHA attempted to implement new coordinated financial statements for use in the County Offices. What happened to this attempt?

Answer: The Food Security Act of 1985 prohibited FmHA from completing the implementation of the coordinated financial statements.

Question: Is there still a need to implement financial statements in FmHA?

Answer: Yes, there is still a need for FmHA to implement a financial management and farm planning system. The Food Security Act of 1985, required FmHA to conduct a study of the Farm and Home Plan, the present financial statement and farm budget form used by the Agency. The result of this study indicated that the Farm and Home Plan is not adequate for farm financial management purposes. A copy of this study was provided to each member of the House and Senate Agriculture Committees in early 1986.

Question: On Monday before this subcommittee, the Administrator of the Cooperative State Research Service (CSRS) testified that CSRS had developed integrated farm financial statements (IFFS) consisting of a net worth statement, cash flow statement, income statement and debt worksheet for use on micro-computers. Could this be useful for FmHA borrowers?

Answer: Yes, the financial statements that have been developed by the various State Agricultural Experiment Stations and State Extension Services are useful for FmHA borrowers. In fact, many FmHA borrowers use the financial statements and recordkeeping systems developed by the Extension Service. Unfortunately, the numerous systems developed by the various State Extension Service and Cooperative State Research Service may differ from State to State. It is FmHA's desire to develop a system of financial reporting and farm planning for all FmHA borrowers that will be uniform in all States.

In addition, a uniform system could be tailored to be comparable with our computer system now in most local offices to make loan processing more efficient.

Question: Would it be compatible with the current computer hardware and software in use in most FmHA offices?

Answer: In most cases, the various systems that have been developed by the numerous State Extension Services are not compatible with FmHA comuter hardware and software.

Question: Does FmHA have any plans to implement any new financial statements?

Answer: Yes, FmHA is planning to implement a new financial management and farm planning system in stages. At the present time, FmHA is testing three different systems in 20 county offices. The three systems being tested are: 1) a system developed by FmHA that is very similar to a system developed by the Farm Credit System located in Minneapolis-St. Paul, 2) a system developed by the Virginia State Extension Service and 3) a system developed by Missouri FmHA personnel. We hope to complete the testing of these three systems in June 1987, and begin the implementation of a new balance sheet (net worth statement) in October 1987. In turn, at later dates, a cash flow statement and a income statement will be implemented.

QUESTIONS SUBMITTED BY SENATOR GRASSLEY

CHAPTER 12 BANKRUPTCIES

Question: What effect has Chapter 12 had on the FmHA? How many Chapter 12 cases is the FmHA involved in? What guidance have you provided to local or field offices about the new law?

Answer: The Agency, at present, does not maintain any data on the number of Chapter 12 bankruptcies filed nationwide. However, Chapter 12 bankruptcy filings are increasing daily. As of February 28, 1987, a total of 2,821 FmHA borrowers had filed bankruptcy petitions during the fiscal year.

We have issued an Administrative Notice to supplement our regulations as to how to handle those farmers who are filing Chapter 12 bankruptcy petitions. The following is a copy of that Administrative Notice.

[The information follows:]

Administrative Notice to Supplement Regulations for Handling Farmers Filing Chapter 12 Bankruptcy Petitions

FmHA AN No. 1540 (1962)

February 6, 1987

SUBJECT: Processing Chapter 11, 12, and 13
Bankruptcies (Farmer Programs)

TO: All State Directors, State Directors-at-Large,
Farmer Programs Chiefs, District Directors, and
County Supervisors, FmHA

PURPOSE/INTENDED OUTCOME

The purpose of this Administrative Notice (AN) is to provide guidance in the handling of certain bankruptcy actions and procedures for processing those actions which involve the partial release of Farmers Home Administration (FmHA) debt.

COMPARISON WITH PREVIOUS AN

There are no current AN's on this subject. Previous AN's have long expired.

IMPLEMENTATION RESPONSIBILITIES

A new reorganization chapter has been added to the Bankruptcy Code by recently enacted Public Law 99-554 (October 27, 1986). Designated Chapter 12, it is intended to provide an alternative to reorganization under Chapters 11 and 13. This chapter is limited to family farmers and is intended to allow reorganization procedures to be less complicated and more expedient. Previous to this, most farm business operators were forced into complicated Chapter 11 and 13 bankruptcies.

The FmHA is already starting to receive notices of Chapter 12 bankruptcy actions. Chapter 12 bankruptcy actions can be anticipated in addition to the present Chapter 11 actions already in progress. Many of these actions involve reorganization plans that will require the FmHA indebtedness to be reduced to the security value as established by the Court. A "cramdown" of the FmHA debt will occur in these situations, reducing the FmHA debt to the value of the security. If the borrower makes the payments as required by the reorganization plan, the borrower will be released from liability on the unsecured portion of the debt upon completion of the plan.

A previous AN advised that when these cramdown plans are approved by the Court and the FmHA must adjust its accounts, the plan be sent with a memorandum to the Finance Office. The Finance Office has not established procedures for processing these actions and has not adjusted the accounts.

We are in the process of establishing instructions for reconciling FmHA accounts to reorganization type bankruptcies. Until these instructions are promulgated to the field, the same actions as called for in the present FmHA Instruction 1962-A, Section 1962.47 will be in effect.

Upon advice from the County Supervisor that a bankruptcy petition has been filed, a Form FmHA 1951-6, "Borrower Account Description Flag," will be processed with the Finance Office in accordance with Section 1962.47(a). The Finance Office will flag the account and will take no further action until instructions are issued. Dismissed cases, completed Chapter 7 cases and thoses cases where the borrower(s) reaffirm the FmHA debts currently represent no processing problem with the Finance Office and can be handled as usual.

Questions on the above may be communicated through/by State Offices to the National Office, Assistant Administrator Farmer Programs on FTS/COM (202)447-4671.

VANCE L. CLARK
Administrator

EXPIRATION DATE: January 31, 1988

FILING INSTRUCTION: Proceeding FmHA Instruction 1962-A

Question: Is FmHA doing anything different in terms of administering its loan programs as a result of Chapter 12? For example, is FmHA more willing to restructure farm debt -- particularly in terms of a "write down" of mortgage debt -- outside of a bankruptcy proceeding?

Answer: Yes, we agree that a mechanism should be in place to settle the debt and to keep farmers out of Chapter 12. FmHA already has authority to debt settle a debtor's indebtedness without liquidating loan security. A debtor can make FmHA a compromise or adjustment offer equal to the present market value of all security for the debt, including any crop security and any additional amount which the debtor is able to pay. The payments on adjustment offers are usually scheduled for payment not to exceed five years, but can be made over a longer period. In such cases, the debtor may retain possession of the security. The Agency is also examining other options in the direct and guaranteed loan programs of making debt adjustments outside of bankruptcy proceedings.

Question: If your regulations prohibit such a "write down," should new regulations be proposed to give FmHA that flexibility in its negotiations?

Answer: We do not have a program that will allow the Agency to "write down" a borrower's debt to the market value of the security and continue with the borrower. However, the Agency is currently considering a one time write-down of a borrower's debt to the market value of the security and continue with the account, when it is in the best interest of the Government. The debt written down would be set-aside in a noninterest bearing note that would be due when the indebtedness matures or when the property is sold and recovery is greater than the market value at the time of the write-down.

Question: Many have suggested that the advent of Chapter 12 will prompt creditors -- particularly Federal Land Bank -- to be more willing to agree to restructuring of debt outside bankruptcy. Do you know of any evidence of this, or see the potential for this result?

Answer: We have no evidence that creditors are anymore willing to restructure their problem loans. In fact, our interest buy-down program, to assist in such restructuring, has not received the amount of participation we had expected, although we are working to encourage participation.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

BIENNIAL BUDGET CYCLE

Question: Would your Agency favor a biennial budget process? What benefits would your agency achieve in a two-year appropriation cycle?

Answer: A two-year cycle would allow for better planning of both program and administrative expenses. Since we already must consider 5 year projections as we prepare budgets, the transition to a detailed two-year cycle forces many decisions, such as allocations to the field, to be made at the last minute, once appropriation figures are known. A two-year cycle would add more order to this process. Also, a two year cycle would eliminate the considerable amount of non-productive time that the Agency must devote to implementing possible shut-downs as yearly appropriations run out. Uncertainty about appropriations also prevents timely government commitment of funds to projects that are joint public/private enterprises.

Question: Approximately what proportion of your annual appropriation request would you consider simply repetitious of the previous year's submission.

Answer: About 75 percent of our administrative expense account is directed for Agency staffing expenses which are repetitive. Many of the program accounts show changes only for inflation.

Question: What difficulties can you forsee in preparing and submitting a two-year budget to the Congress?

Answer: We anticipate few difficulties in moving to a two-year cycle. We believe our program and administrative activities can be planned and projected over a two-year period.

SUBCOMMITTEE RECESS

Senator BURDICK. This will conclude today's hearing. We appreciate your having been here today to share with us concern over the fiscal year 1988 budget.

Our next hearing will be held next Tuesday, March 17, in this same room, beginning at 10 a.m. At that time, we will hear from representatives from the Food and Nutrition Service and the Human Nutrition Information Service. Until then, this committee stands in recess.

[Whereupon, at 12:25 p.m., Wednesday, March 11, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, March 17.]

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